

URBAN IDENTITY AS A COMPLEMENTARY TOOL TO URBAN WELLBEING

Dissertation

zur Erlangung des akademischen Grades
Doktor der Ingenieurwissenschaften (Dr.-Ing.)
an der Universität Duisburg-Essen
Fakultät Ingenieurwissenschaften
Abteilung Bauwissenschaften
Institut für Stadtplanung + Städtebau

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Abgabedatum: 23. August 2017
Tag der mündlichen Prüfung: 12. Oktober 2017

"Printed and/or published with the support of the German Academic Exchange Service".

Summary

The society we live in, is a society in transition wherein ideas of growth and wellbeing are equally debated. The call to make cities sustainable and resilient of the Goal number 11 of the Sustainable Development Goals (SDG), was further strengthened by the New Urban Agenda (NUA). The WBGU report on the same highlights the need to understand wellbeing and *Eigenart* (or identity) and address them at various levels including policies. This PhD research assumes great significance in this context. The first objective of this research is to understand Wellbeing and its attributes in the urban context, especially from the perspective of post-industrial revolution urbanization in the western world. Wellbeing as concept has eluded thinkers and practitioners alike since the time of Aristotle and has been dealt primarily within the realm of philosophy, psychology and even economics but is relatively unexplored from the urban planning perspective. However, the applied modules of wellbeing such as sustainability and quality of life are often discussed. The notion of wellbeing is very exhaustive and to do justification to the resources, this notion was systematically narrowed down by establishing links between its various attributes among which Urban Identity (similar to the *Eigenart* concept of WBGU) is further researched.

This research thoroughly examines the various theoretical aspects of urban identity and highlights the ways to adapt them to the needs of urban planning. This research also discusses four global best practices that relate various theoretical aspects and provide a valuable understanding of how these concepts can be converted into actions and projects. Based on the theoretical framework of this research, the urban identity of three different neighborhoods of the city of Essen is empirically analyzed. This allowed for a comparative understanding of the role the identity of different neighborhoods within the same city plays in their overall wellbeing. These results were finally weighted w.r.t. the overall priorities expressed by the respondents from Germany on the 'Better Life Index' created by the OECD. The final part of research highlights avenues through which urban identity can be used as a complementary tool to enhance comprehensive wellbeing.

The urban identity of the case study areas thus obtained, supports the hypothesis of this research and indeed provides an alternative understanding of these areas than the prevalent notion about them. This research provides a strong theoretical framework for the wellbeing driven urbanization in the 21st century which with the support by the advancement in technology (such as big data), has the potential to create more participative and flourishing cities for all.

Zusammenfassung

Die Gesellschaft, in der wir leben, ist eine Gesellschaft im Wandel in der Ideen für Wachstum und Wohlbefinden gleichermaßen diskutiert werden. Der Aufruf Städte nachhaltig zu gestalten im Sinne der *Sustainable Development Goals* (SDG), speziell Ziel Nummer 11, und widerstandsfähig zu machen wurde durch die neue städtische Agenda (*New Urban Agenda*) Nachdruck verliehen. Der WBGU-Bericht betont die Notwendigkeit, Wohlbefinden und Eigenart (oder urbane Identität) zu verstehen und sie auf verschiedenen Ebenen in die Stadtplanung und Forschung einzubeziehen. Diese Doktorarbeit ist in diesen Kontext eingebunden und räumt der Thematik Wohlbefinden und Eigenart eine zentrale Rolle ein. Das gesteckte Ziel dieser Doktorarbeit ist es, Wohlbefinden und die dazugehörigen Attribute im städtischen Kontext zu verstehen, vor allem im Rahmen postindustrieller Urbanisierung in der westlichen Welt. Seit der Antike, in Zeiten von Aristoteles, wurde Wohlbefinden als Konzept von Denkern und Praktikern gleichermaßen betrachtet, anfänglich hauptsächlich in den Bereichen Philosophie, Psychologie und später in Disziplinen wie Ökonomie; aus Sicht der Stadtplanungsdisziplinen ist die Thematik jedoch noch relativ unerforscht, obwohl Module des Wohlbefindens wie Nachhaltigkeit und Lebensqualität oft diskutiert werden. Der Begriff des Wohlbefindens wird sehr ausführlich behandelt im Rahmen dieser Arbeit, besonders in Hinblick auf die existierenden Literaturressourcen. Dieser zentrale Begriff und Forschungsschwerpunkt wurde systematisch eingegrenzt auch in Hinblick auf die anknüpfenden und vielfachen Aspekte unter denen städtische Identität (ähnlich dem Eigenart Konzept des WBGU) erforscht wird.

Diese Forschung untersucht eingehend die verschiedenen theoretischen Aspekte der Stadtidentität und zeigt Wege zur Anpassung an die Bedürfnisse der Stadtplanung. Außerdem beschreibt diese Arbeit vier global *best practices*, die sich auf verschiedene theoretische Aspekte beziehen und liefern ein wertvolles Verständnis wie diese Konzepte in praktische Vorhaben und Projekte konvertiert werden können. Basierend auf dem theoretischen Rahmen dieser Forschung, wird die städtische Identität der drei verschiedenen Vierteln der Stadt Essen empirisch analysiert. Dies ermöglicht einen komparative Ansatz um die Rolle von Identität in den verschiedenen Nachbarschaften, innerhalb einer Stadt, und Aspekte wie Wohlbefinden und Nachhaltigkeit zu beleuchten und besser zu verstehen. Die Forschungsergebnisse wurden gewichtet, entsprechend der Befragungen im Rahmen von der OECD erstellten "*Better Life Index*" und gegenübergestellt. Der letzte Teil der Forschung zeigt Wege durch die urbane Identität als ergänzendes Instrument verwendet werden kann, um umfassendes Wohlbefinden im Städtischen Raum in die nachhaltige Stadtplanung und Strategieentwicklung zu integrieren.

Diese Forschung bietet einen starken theoretischen Rahmen für die Diskussion, Forschung und Planungsansätze im Bereich urbanes Wohlbefinden um einen Betrag zu leisten neue Wege zu finden die Gefahren der Urbanisierung im 21. Jahrhundert zu kontern. Darüberhinaus bietet diese Arbeit die Grundlage Urbanisierungsprozesse, die Thematiken wie Wohlbefinden nicht vernachlässigen können, durch wissenschaftliche Ansätze, holistisch zu betrachten und durch den Fortschritt in der Technologie (wie *Big Data*) Potenziale zu nutzen um partizipative und blühende Städte für alle zu schaffen.

Acknowledgement

I take this opportunity to express my sincere gratitude to all those who directly and indirectly helped me to accomplish this research, be it in terms of direction and guidance, study materials, logistics or personal support. First of all, I want to thank my thesis supervisor Prof. Dr.-Ing. J. Alexander Schmidt from the Institute of City Planning and Urban Design (ISS) whose support, guidance and motivation has been paramount for the accomplishment of this work. I am also sincerely thankful to my co-supervisor, Prof. Dr. Hans-Werner Wehling from the Institute of Geography for his guidance and support.

I am deeply thankful to the German Academic Exchange Service (DAAD) for supporting this research through scholarship. I want to express my gratitude to the members of the doctoral programme ARUS. I am also thankful to my colleagues from the Institute of City Planning and Urban Design (ISS), especially to Hanah, Fabian and Sabina who continuously helped me in data collection. I am also thankful to the city administration of Essen (Stadt Essen), KWI and EVAG for providing the required data.

I would like to express my sincere gratitude to all the authors, writers, bloggers and gurus, whose work inspired me all through my thesis and bestowed me with the knowledge which not only was useful for my thesis but had a deep positive influence on my thinking process as well. Heartily thanks go to my friends who kept me motivated and focused during these three and half years. My parents, my wife and my family members, who provided support and knowledge through various channels which made this tedious work fun, were the lifeline of this study. I also express my sincere gratitude to all those whom I could not mention here. Last but not least, I am thankful to all the logistics providers including the staff members of the University of Duisburg-Essen, the software companies and the country of Germany for making this study a success.

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Acronyms

Avg. – Average

BLI – Better Life Index

CBD – Central Business District

CIW – Canadian Index of Wellbeing

CSA – Case Study Area

CWB – Collective Wellbeing

DU – Dwelling Unit

EU – European Union

EVAG - *Essener Verkehrs-AG*

GDP – Gross Domestic Product

GWl – Gallup-Healthways Wellbeing Index

Ha- Hectare

Hbf – *Hauptbahnhof* (Central Train Station)

HDI – Human Development Index

ISS - *Institut für Stadtplanung und Städtebau*

KWI - *Kulturwissenschaftliches Institut, Essen*

NRW – North Rhein Westfalen (Westphalia)

NUA – New Urban Agenda

PLZ – *Postleitzahl* (zip code)

PT – Public Transport

PUI – *Proyecto Urbano Integral* (Integral Urban Project)

QoL – Quality of Life

SDG – Sustainable Development Goals

SoL – Standard of Living

SWB – Subjective Wellbeing

TRC - Transportation Research & Consulting GmbH

UN – United Nations

USA – United States of America

WBGU – *Wissenschaftliche Beirat der Bundesregierung Globale Umweltveränderungen* (German Advisory Council on Global Change)

W.R.T./(w.r.t.) – with respect to

WHO – World Health Organization

Chapter 1 Introduction

The quest for the betterment of life has been the quest of civilizations. Cities are called the engines of economy (Katz, 2011). Traditionally, cities were located close to water sources and along the trade routes (McCarthy & Johnson, 2012). While the technical advancements allowed cities to decrease their dependence upon the proximity to natural resources, they continue to be highly dependent upon their economic functions. The last few decades witnessed neo-liberal free market economy dominating the world, which was accompanied by the growth of mega cities across the world (DESA, 2014).

In the globalized world, neo-liberal urbanization is widely implored and cities are exploring harmonizing ways to enhance the wellbeing of their citizens. Various think tanks and civil societies have been long advocating for a shift in the economic framework from growth to wellbeing (Meadows, Meadows, Randers, & III, 1973). ‘You reap what you sow’, goes the old saying which holds true for policies as well, as Martin Seligman argues “...[G]ross domestic product should no longer be the only serious index of how well a nation is doing. It is not just the alarming divergence between quality of life and GDP that warrants this conclusion. Policy itself follows from what is measured, and if all that is measured is money, all policy will be about getting more money” (Seligman, 2011). In the view of economic crisis, the shift to wellbeing from growth looks very likely (Padoan, 2013). Health and wellbeing is a part of goal number 11 of Sustainable Development Goals declared by the UN as well as it is the main focal point of the New Urban Agenda (NUA)

This doctoral research aims at understanding two key theoretical aspects, namely wellbeing and urban identity, and to examine their correlation with the city, the urban habitat of the mankind. First, it attempts at investigating what does the concept of wellbeing mean in the context of cities. In order to do so, it delves deeper into the theoretical realm of wellbeing, explores its various attributes and the focuses on the one particular attribute urban identity. Urban identity is then second theoretical pillar of this research. It is further understood by analysing three neighbourhoods in the city of Essen, Germany empirically. This research culminates in policy and strategy recommendations to strengthen the wellbeing and urban identity of the case study areas and suggests a broader outlook for the cities of the 21st century, based on the analysis done in the case study and the literature research.

1.1 Problem Statement

Cities are called the engines of economy. Ever since humans started living in organized groups and urbanization started, cities have been the centre of growth, trade and power. Two of the most influential factors shaping this growth process have been the availability of resources, especially water and trade and business (economy) (Henderson, 2010). Traditionally cities were located close to the sources of water and along the trade routes. With the advancement of technology, cities started swelling in size, their location became relatively independent from the proximity to natural resources and the wave of globalization made cities less dependent on their geographical settings. However, the correlation between economy and urbanization kept getting stronger and today majority of cities across the world are also regional employment, business and trade hubs (Programme, 1990).

The big wave of urban growth came with industrialization and many big cities of then such as Manchester, Birmingham and London in England spread their dominance primarily due to their stronger economy driven by massive industrial production. The mega cities of today New York, Tokyo, São Paulo, Mumbai and others, contribute disproportionately high proportion to their respective regional GDP as compared to the rest of the region (EURAMET, 2013). This new production (and consumption) based urbanization that needed higher density of people living close to each other and their work places, resulted in exponential urbanization across the globe, and now for the first time in human history we live in a predominantly urban world (Division, 2012). This is when large developing countries like China and India and several nations in Africa still have the majority of their population living in the rural areas (Agency, 2013). Looking forward, world is likely to get more urban in the times to come, as the UN predicts the percentage of people living in urban areas to increase from 54% in 2014 to around 66% by 2050 (Nations, 2014) .

This shift from rural to urban was and is fuelled by the aspirations of a better quality of life and higher wellbeing. Increasing income, better education and medical facilities became the yardsticks to gauge the level of development and even the first human development index was based on the measurement of these three parameters (Programme, 1990). As we became more urban than rural, focus has shifted again to what has been the main driver of urbanisation, the quest for betterment of life. Questions are being asked if the present model of urbanization is sustainable, and more importantly, are our cities fostering happiness and wellbeing? “Do I believe that on the whole people are happier now than they were 40 or 50 years ago? When asked this, almost everyone says, ‘no’” (Hamilton, 2003), “Even though Americans earn twice as much in today’s dollars as they did in 1957, the proportion of those telling surveyors from National Opinion

Research Centre that they are “very happy” has declined from 35 to 29 percent” (Myers & Diener, 1996).

In recent times, many authors and the United Nations Development Programme (UNDP) have defined human development more comprehensively (Programme, 2006); (Sen, 1999); (Stiglitz, et al., 2009), shifting the focus from mere economic development to inclusive wellbeing. Based on this, it can be argued that wellbeing shall be the driver of human development in times to come and cities accordingly, will undergo structural transformations to nurture wellbeing rather than functioning predominantly as employment hubs only. This study is aimed at understanding what this notion of wellbeing means for the cities of today and how their identity can be one of the main contributing factors to enhance it.

The relationship between an individual and the economy has direct implications on the society (Rothbrad, 2009). The Eurozone Crisis¹ resulting into severe recession (in some large and small countries) has put the European Union under severe financial and political pressure. One of the central issues being debated is the continuously increasing production and consumption. The changing relationship between the individual and the economy is bound to have impact on the society. The spatial dimensions of this relationship between individual, society and economy are sensitive to any changes in one or more of these relationships as illustrated in figure 1-1. Accordingly, space plays a central role in the interaction between above three actors and changes.

Post the economic recession of 2007-2008, many of the economies across the world are strained and there is an emerging consensus on sustainable, cost effective and people centric development; this study shall enable the decision makers to have a comprehensive vision for the cities of future and allow the implementing agencies to prioritise their expenses in a way to maximise the wellbeing of people.

John Snow’s mapping of London in 1854 is one the landmark moments of modern urban planning which was followed by the works of Patrick Geddes. Both these works focused on improving the overall quality of life in human settlements (Schwab, 1992); (Hall, 2014). This momentum was later changed into the modernist planning by Le Corbusier (and others) that drove the urbanization around the western world for much of the first half of 20th Century (Harvey, 1990). The classic ideological tug of war surrounding the urban planning of New York between Jane Jacobs and Robert Moses was the landmark moment of the arrival of postmodernist planning, which was

¹ The Eurozone Crisis refers to the European Debt Crisis that started in 2009

further advanced by David Harvey (Harvey, 1990). These landmark moments can be seen as the consecutive paradigm shifts in the understanding wellbeing in cities. With the advancement of technology and the emergence of new challenges such as (lack of) sustainability and climate change, the wellbeing debate in urbanization is witnessing another significant turn through the work of pioneers like Manuel Castells (Castells, 1997). The notion of wellbeing has been changing all this while, and the debate on defining it in the 21st century amid all these changes and challenges is raging.

Table 1-1: The main actors of the European Cities

	Medieval Cities	Industrial Cities	Neo-liberal cities
Lead Actor	Trade (guild)	Capitalist	(Regulated) Free market
Rationale	Order	Production	Consumption
Need	Defense	Hygiene	Order
Regulative stakeholders	King + Religion	Capitalism + Administration	Administration + Capitalism + Public!
Source: - by author, based on the research on European Cities only			

Table 1-1 summarizes various theories related to the functioning of medieval cities to the neo-liberal cities in Europe. Cities during this time-period can be understood as a combination of three factors, a) the leading actor who had a very significant and direct impact upon the physical form of the city, b) the rationale behind cities – why cities were how they were; the logical thinking that derived the conceptualization of cities and c) the regulative stakeholders – these were the main actors who could be identified as the main decision making institution related to the functioning of the city.

Cities of the 21st century are different from the three described above. It is still very early to define who are going to be the lead actors and regulative stakeholders of these cities but the rationale is becoming clearer over time and that is derived by the many causes that have gained our attention ranging from sustainability to the right to city, inequality and wellbeing. This research explores wellbeing as the umbrella (overarching) concept behind these causes and as one of the main driving force behind the 21st century cities.

1.2 Research Objectives and Hypothesis

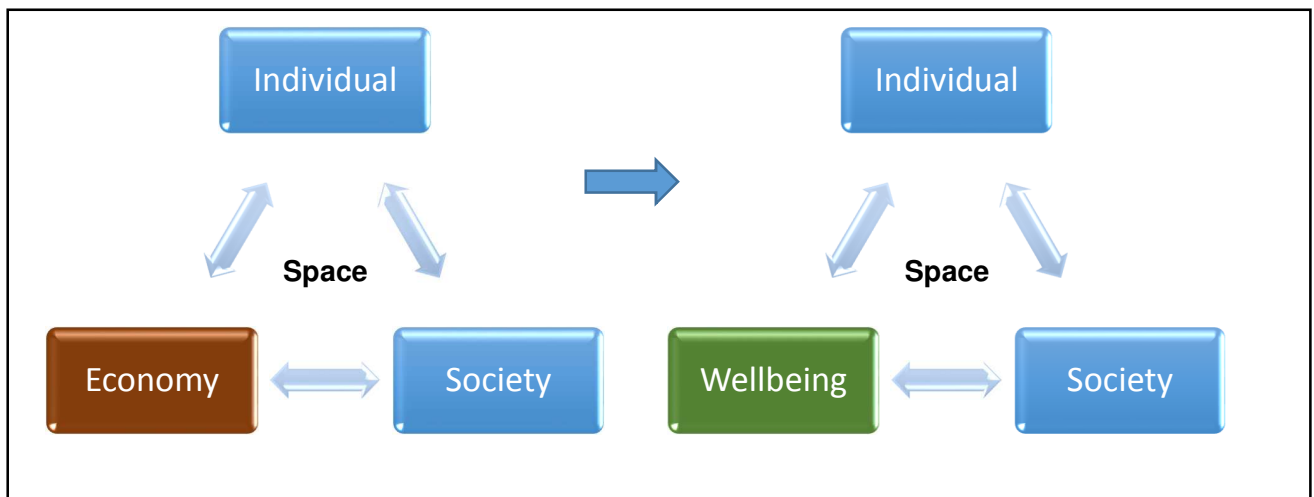
The objective of this research is to theoretically and empirically understand the notions of wellbeing of urban residents and the identity of an urban space, from the urban planning perspective. For these two notions, this research aims to provide the theoretical understanding,

highlights the attributes of inter-connectedness and create a policy framework for the implementation of supportive policies. The New Urban Agenda (NUA) calls for the preparation of “an evidence based and practical guidance for the implementation of the NUA” which should be prepared by all relevant stakeholders (Nations, 2016, p. 17). This research aims to serves further as guide along the same lines for wellbeing related issues (especially urban identity) as mentioned in the NUA (see section 2.7.1). This research is based on the following hypothesis: -

“The identity of an urban area provides with a different understanding of the wellbeing in that area than the prevalent notion about it”.

This research is theoretical in spirit with the underlying objective of adding to the applied side of urban planning as a discipline through trans-disciplinary research. Life in cities is a very complex and dynamic process, and numerous fields of study/research go into it to make our collective life experience better. Urban planning as a discipline (like many others) is in the progress of understanding this vast network and finding how various (apparently disjoint) disciplines can come together to collaborate toward the same objective, i.e. to improve the life experience for everyone. Therefore, this research ventures into the related aspects from other disciplines such as sociology, philosophy, anthropology, economics and psychology, and aims at combining these from the perspective of urban planning.

Figure 1-1: Relationship between Individual, Society, Economy, Wellbeing and Space



Source: by Author

Figure 1-1 illustrates the research objective. This research aims at understanding wellbeing from the spatial (urban planning) perspective and explores wellbeing as the larger narrative of cities instead of (only) economy. Space is shaped by the interaction between three main actors (in

addition to various forces), individual, society and the driving force. The neo-liberal cities were based on this assumption that Economy is this driving force; this assumption is being continuously challenged and this research explores the notion of wellbeing being the driving force instead of economy.

The four fundamental research questions that this research answers are as follows,

1.2.1 Research Questions

This research answers the following fundamental research questions;

1. How the wellbeing of people in cities can be described from the urban planning perspective?
2. What does the notion of urban identity stand for from the urban planning perspective?
3. How urban identity can be empirically understood? What are the various constituent factors of urban identity that can be quantified?
4. How the understanding of urban identity can be used to enhance the understanding of the state of wellbeing of the same area?

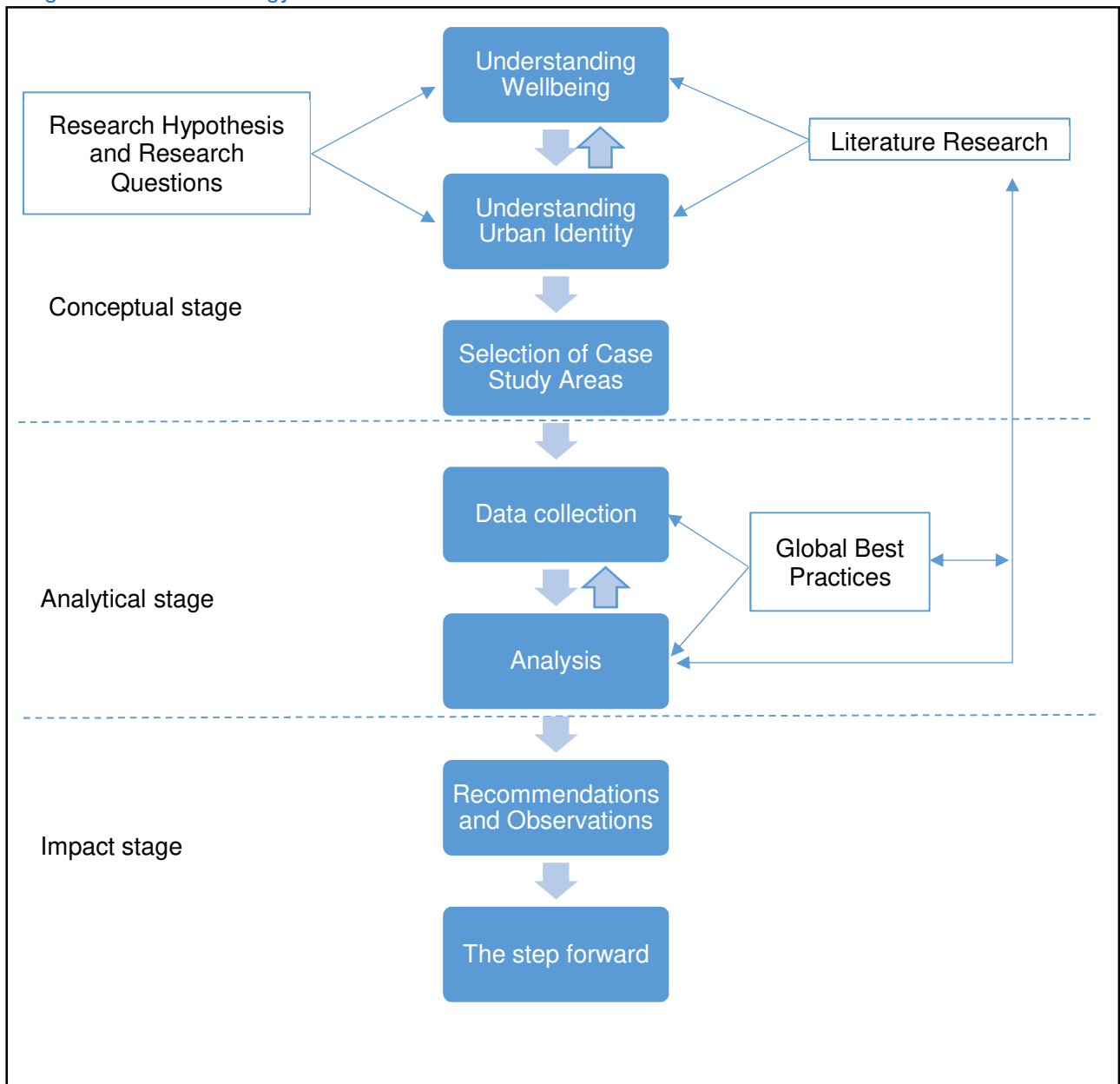
1.3 Methodology

This research can be theoretically divided into three different stages namely conceptual stage (chapter 1 to 3), analytical stage (chapter 4 and 5) and the impact stage (chapter 6). The first and last stages deal with the policy related issues while the second stage deals mainly with empirical analysis. To spatially understand the theoretical framework of this research, three neighbourhoods in Essen were selected as the Case Study Areas (CSAs). Based on the parameters defined in chapters 1 to 4, required data was collected and analysed for these CSAs; which are further analysed in chapter 5. Chapter 6 can be theoretically called as the impact stage of this research as it highlights the impact that urban identity has on the wellbeing as well as presents the likely policy recommendations stemming from this research that have the potential to enhance the wellbeing in urban areas. These stages are shown Figure 1-2. Based on the literature research, this research was empirically analysed only for one geographical and cultural region (Essen, Germany). As both these notions of wellbeing and urban identity are relatively less explored from the perspective of urban planning; the selection of three neighbourhoods of the same cultural and geographical context, allowed an in-depth comparative analysis. This selection of case study areas was done considering the availability of relevant data, resources including time as well as the ability to do an in-depth analysis of the subject areas. These are further explained in Chapter 5.

The first year of this doctoral research focused on studying these theories and synthesizing them from the perspective of wellbeing. The conceptual stage is aimed at understanding the relationships between the various variables/components that collectively form the sense of wellbeing for individuals, and then this subjective understanding of wellbeing is translated into the notion of collective wellbeing. Urban identity is one of these components and this research aims specifically at understanding the theoretical concepts behind it, from the urban planning perspective. The conceptual stage involved extensive literature research which constantly provided a feedback in revising the hypothesis and research questions over the period of research. Figure 1-2 shows a two-way flow of information between the first two tasks, understanding wellbeing and understanding urban identity as these two concepts are highly interconnected. While wellbeing is the overarching theoretical basis for this research and urban identity is explored here as one of the components of wellbeing. Better understanding of urban identity helped in an enhanced understanding of wellbeing as well. The third task at this stage was to define the criteria for the selection of case study neighbourhoods and to select them. This part of research is presented in Chapter 2 and 3, the selection of CSAs is discussed in Chapter 5.

The second stage of research called the analytical stage began after the selection of case study areas. Based on the understanding of the notions of wellbeing and urban identity and the identification of the components of urban identity, relevant data from the CSAs was collected from relevant secondary sources. The data collection and analysis was done by categorizing the variables under different headings such as socio-economic data, association, history etc. This part is covered in the chapter 5. This part of research provides some new and interesting insights into the CSAs. This stage also covered some innovative and pioneer global best practices which are implemented in different parts of the world. The learnings from these global best practices helped in data collection as well as analysis, while adding substantially to the literature research. This is presented in Chapter 4.

Figure 1-2: Methodology flow chart



Source: - by Author

The third and the final stage of this research is termed as the impact stage, as it provides first a clear understanding of how urban identity complements the notion of wellbeing as well as the policy recommendations for the implementation of the same. This is covered in Chapter 6.

Table 1-2 provides the lists of major tasks and the expected output for each stage of this research.

Table 1-2: Methodology – tasks and outputs

Stage	Major tasks	Expected output
Conceptual	<ul style="list-style-type: none"> • Literature Search • Discussions • Primary survey (if needed) 	<ul style="list-style-type: none"> • Definition, description and the understanding of key concepts • Identification of key parameters/components
Analytical	<ul style="list-style-type: none"> • (Longitudinal) data collection and analysis • Learning from the global best practise 	<ul style="list-style-type: none"> • Establishing relationship between different components • Comparative understanding of the CSAs
Impact	<ul style="list-style-type: none"> • Analysing various factors impacting and forecasting the likely to impact the relationships in future 	<ul style="list-style-type: none"> • Policy recommendations
Source: by Author		

1.4 Data Collection

Considering the availability of resources and limitations of this research, data was primarily collected from the secondary sources. This research was done in cooperation with the administration of city of Essen (referred to/as Stadt Essen), which has provided the majority of data used in this study. A significant amount of secondary data was obtained from the data available in the public domain from other public and non-public institution in the state of North Rhine Westphalia (NRW) where Essen is located. Another important source of data is the study called the “*Neue Verkehrskonzepte für die Stadt der Zukunft*” (or New mobility concepts for the city of future) conducted in March 2012 by the *Institut für Stadtplanung und Städtebau* (ISS), *Universität Duisburg-Essen*, *Kulturwissenschaftliches Institut*, Essen (KWI) and Transportation Research & Consulting GmbH (TRC) (Stiftung, 2013). The local public transport company EVAG, has provided relevant data for this research as well. Secondary data from some of the reputed organizations at the European and international level has been used as well including the OECD, Gallup World Survey² and Eurobarometer³.

² Gallup world poll is conducted in more than 140 nations across the globe by the Gallup organization, Washington D.C. U.S.A.

³ Eurobarometer is the public opinion analysis sector of the European Union

1.5 Limitations of research

Every research is bound by certain limitations and this one is no exception. Time is one of the most crucial factors to this research as it defined the extent of work that was to be undertaken from the beginning. Competing a doctoral research within the short time frame of three years is often considered very challenging and considering the theoretical framework of this research, this task was made even more challenging as the understanding of wellbeing and urban identity from the urban planning perspective is still very nascent. The total time taken for this research from the beginning till the end is three and half years. The (lack of) availability of data related to some aspects is a limitation factor as well, as there are fewer sources of longitudinal qualitative data covering some of the parameters used in this study. Keeping these limitations in mind, no primary data collection was done as the sheer scale of the data needed made it impossible for one researcher to undertake it, instead the primary data collected by other sources was used whenever relevant and available. As this research is based on the data collected from the secondary sources, this itself became a limiting factor as it was not possible to retrospectively modify the way data was collected.

The quantification of qualitative notions is often debatable, and as this research deals with many qualitative and subjective notions, measuring them empirically has been a challenge as well. This limited the extent of research as well, however, the concepts have been dealt with in their original spirits to the extent possible.

1.6 Ethical Considerations

This study was undertaken with the following ethical consideration which defined the way it was conducted and should be further understood: -

1. All the sources of information and references are duly referenced.
2. The data used is in the original form and wherever it was used in a different form than its original form, (grouped, assigned weightage etc.), the process is duly mentioned.
3. No infringement of personal privacy is done and all the data is anonymized unless required by the law of the land.
4. All the observation, analysis and recommendation of this work is factual and pragmatic excluding the personal and ideological biases of the author to the extent possible.

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Chapter 2 Understanding Wellbeing

This chapter deals with the historical as well as contemporary scientific understanding of wellbeing, its description and measurement. It forms the main theoretical base for this research. The concept of wellbeing is first analysed from the perspective different disciplines such as Psychology and Economics, which is then further analysed to understand how this relates to urban planning and what does it mean for cities.

2.1 Wellbeing Historical Perspective

From the discovery of fire and the invention of wheel to the discovery of fundamentals of universe and invention of super computers; from the time immortal to today, the quest for the betterment of life has been the quest of humanity. This quest is driven by the desire to live a happy and worthy life. As Matthieu Ricard⁴ says “Nobody wakes up and wishes to be unhappy; we all want to live a happy life”. Aristotle called this quest for happiness, Eudemonia (Lab, 2016). In this regard, cities are seen as the most significant adaptation mechanism developed by the human(being) to survive amidst a dynamic nature; “city is man’s most successful attempt to remake the world he lives in” (Park, 1967) . For a long, we lived in predominantly small settlements with our life being dependent upon and a resultant of our natural surroundings. Fast forward to the modern era, cities as we experience them today in many parts of the world changed significantly post industrial revolution which were influenced among others, by the emerging technology such as commuter rails which allowed cities to grow for miles. We hoped that this new way of life fuelled by enhanced production will provide us a steady income and freedom from famine and other tyrannies of life that had so far been based mainly on the primary means of production. However, these cities turned out to be much different for most of these people who flocked to work in industries. Peter Hall in his book “Cities of Tomorrow” has captured the disdain that these “Cities of Dreadful Nights” brought upon their residents.

“The tenement districts of New York are places in which thousands of people are living in the smallest place in which it is possible for human being to exist – crowded together in dark, ill – ventilated rooms, in many of which the sunlight never enters and in most of which fresh air is unknown. They are centres of disease, poverty, vice and crime, where it is a marvel, not that some

⁴ Matthieu Ricard is a noted molecular genetics scientist turned Buddhist monk and has published various books on the subjects ranging from Buddhism to happiness. This quote is from his famous talk “The Habits of Happiness” given in 2004. https://www.ted.com/talks/matthieu_ricard_on_the_habits_of_happiness

children grow up to be thieves, drunkards and prostitutes, but that so many should ever grow up to be decent and self-respecting" (Hall, 2014, p. 39).

This led to some of the path breaking developments in cities and resulted into the beginning of modern urban planning. The British Royal Commission of 1885 looked closely into the "moral inferno" that the cities of England of that time had become, and supportive works such as Charles Booth's survey of London⁵ and John Snow's London Mapping⁶ in 1854 together culminated in the 1885 Housing for Working Class Act which paved the path for the modernisation of British cities for masses (Hall, 2014). Across the Atlantic, the Tenement Housing Commission of 1894 and 1900 looked into similar problems and paved way for the modernisation of cities in the U.S. (Hall, 2014). Irrespective of the different paths cities across the Atlantic progressed upon, these two examples underline the ever-important need to live a habitat that nurtures and fosters a better quality of life.

This understanding of a better quality of life has been changing over time. This chapter aims to understand this underlying strive of cities to provide a better quality of life to its residents. It has been named and understood differently; from happiness to quality of life and to wellbeing. The notion of wellbeing is selected for this research as it allows to focus on the aspects that are necessary and relevant from the urban planning perspective. This research is focused on the understanding what does wellbeing mean for contemporary cities and what it consists of.

We are living in a time when the status quo is being challenged. Ideas beyond the neo liberal market economy that had defined for a long period how our cities will grow and, to the great extent, how we will live our life, are being implored (Harvey, 2007). Many leading voices have called to look beyond the *Growth Fetish*⁷ (Hamilton, 2003); (Stiglitz, Sen, & Fitoussi, 2009). Our world is facing many new challenges that our ancestors did not have to face. Sustainability and resilience are two prime concerns that have forced us to thoroughly think how we want to pave our ways into future. This is where wellbeing comes into discussion as the central concept that holds together most of the ongoing debates related to sustainability, resilience, earth jurisprudence and others. This chapter explores wellbeing in the larger conceptual framework for cities as well as its potential as the main driving force behind the contemporary cities. One of the

⁵ Charles Booth was a ship-owner who eventually became a socialist and conducted the first major survey in 1887 to understand the nature of employment in London

⁶ John Snow was an English physician whose path breaking work established the link between the location of the source of water and the Cholera outbreak in London in 1854

⁷ Growth Fetish denotes the obsession of countries to grow their GDPs over years, treating it as the measurement of progress and the wellbeing of people.

major challenges of this research remains the appropriation of the concept of wellbeing which has been predominantly dealt by the scientific disciplines of psychology and economics. In order to translate these concepts into urban planning, this research has focused on various attributes of wellbeing and analysed them from the urban planning perspective.

2.2 Understanding Wellbeing – Interdisciplinary Perspective

What is wellbeing? The word 'wellbeing' (or Well-being, these two are often used interchangeably) consists of two words, "well" and "being" and the literal interpretation of the word can be termed as "being well" or the state when things are generally fine. The Cambridge online dictionary defines it as "the state of feeling healthy and happy" (Press C. U., 2016). While the Merriam-Webster online dictionary defines it as "the state of being healthy, happy, or prosperous" (Merriam-Webster, 2016) and the Oxford online dictionary defines it as "the state of being comfortable, healthy, or happy" (Press O. U., 2016). What is evident from these definitions is that wellbeing is a state that is the resultant of factors such as health, happiness, prosperity, comfort etc. These constitutive factors have been thoroughly researched in different disciplines and it can be argued that they all express a form of positivity in life. Leading authors have argued that "it would be appropriate for a new definition of wellbeing to centre on a state of equilibrium or balance that can be affected by life events or challenges" (Dodge, Daly, Huyton, & Sanders, 2012). This allows wellbeing to be described as a range of possibilities rather than a fixed point or a singular event in one's life.

2.2.1 Hedonic and Eudaemonic

Depending upon which of the aforementioned factors is assumed to be the central factor, the understanding of wellbeing can change slightly. There have been historically two approaches to study wellbeing, first the hedonic tradition "which accentuated constructs such as happiness, positive affect, low negative affect, and satisfaction with life", and the second eudemonic tradition, which highlighted positive psychological functioning and human developments (Dodge, Daly, Huyton, & Sanders, 2012). The word 'hedonic' stands for connection with feeling of pleasure. The words 'eudaimonic' or 'eudaimonia' translated from Greek are defined as "human flourishing" or simply welfare. Historically there has been a great fascination with happiness, understanding what happiness is and how people can be happy. Many of these debates were later used to provide a broader understanding of wellbeing, as happiness is one of the most recurrent and central factors of wellbeing. Aristotle termed happiness as the central purpose of human life and goal in itself in his influential work *Nicomachean Ethics* (Lab, 2016). Aristotle's notion of happiness is more of a lasting feeling that encompasses the totality of one's life, neither is it pleasure nor is

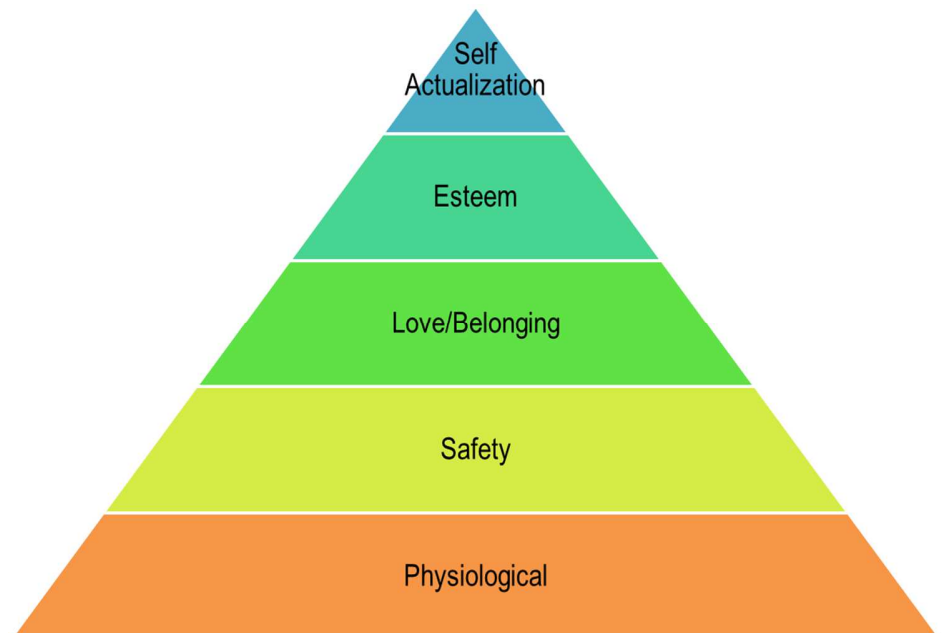
it a virtue, it is the end goal of life (Inc. P. o., 2016). This is what in his book “*Happiness: A Guide to Developing Life's Most Important Skill*” Matthieu Ricard differentiates between happiness and pleasure, where happiness is a state while pleasure is contingent upon its subject, resource and time hence ephemeral (Ricard, 2015).

Over the period of time, the understanding of wellbeing especially through positive psychology has been more and more of ‘Eudaimonia’ or human flourishing which Martin Seligman further argues is a condition that enables people to form lasting relationships, talent, meaning to life and contribute to the world (Seligman, 2011).

2.2.2 Abraham Maslow’s hierarchy of needs

Abraham Maslow’s hierarchy [Figure 2-1: Maslow’s Hierarchy of needs](#)

of needs remains one of the most researched concepts in understanding wellbeing in the modern world. Published in his 1943 paper “A theory of Human Motivation”, figure 2-1 is the interpretation of his theory and highlights how different needs of the human being cater to different psychological states and how we progress from one into another during our life. Based on the analysis of the best role-models in society, there are four types of needs that must



Source: - by Author based on Abraham Maslow’s Hierarchy of Needs

be satisfied before a person can act unselfishly. Maslow referred to the four lower needs as “deficiency needs” because their lack creates a tension within us (Ledbetter, Griffin, & Sparks, 2014). Here various needs are in progressive order, meaning that the fulfilment of the need below the ladder, elevates the desire for the next need. However, later researchers disagreed on whether these needs are progressive or simultaneously. Ed Dinner argues “...balance in life is desirable; this follows from the fact that each of the needs makes separable contributions to SWB (Subjective Wellbeing) ...Thus, because people need to fulfil a variety of needs, it is likely that a

mix of daily activities that include mastery, social relationships, and the meeting of physical needs is required for optimal SWB” (Tay & Diener, 2011).

More basic needs such as food, sleep, clothing, sex etc. which are needed for mere survival, form the base of this pyramid and are collectively termed as physiological needs. In a city, these needs pertain to the needs for adequate affordable housing, access to food and clothes and enabling conditions for residents to find and form relationships. Safety needs relate to personal and financial safety and good health. From the urban planning perspective, these needs correspond to a safe city that provides adequate employment and healthy living conditions. The needs related to love/belonging relate to personal and social relationships (such as friendship, family and intimacy) and from this aspect, a city should function as the adobe where these relationships can be formed and fostered. The second last need “Esteem” consists of two major factors, “Self Esteem” which comes through achievement and “Recognition” which comes through the respect by others (Ledbetter, Griffin, & Sparks, 2014). For Maslow, Self-Actualization is “this tendency that might be phrased as the desire to become more and more what one idiosyncratically is, to become everything that one is capable of becoming” (Maslow, 1954). Self-Actualization is termed by Maslow as the ultimate aim of human life which can be fostered by a supportive environment.

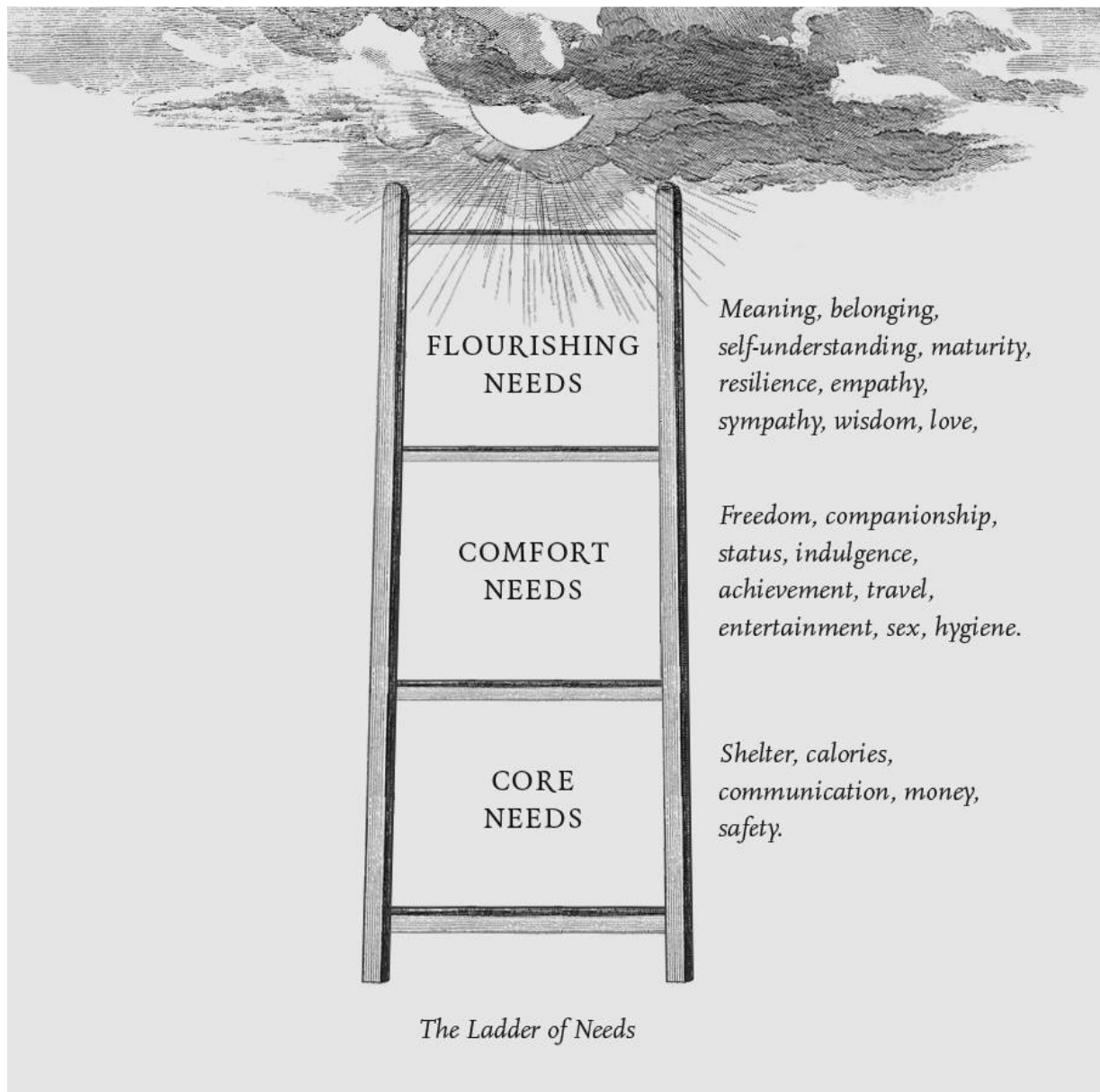
By providing an ideal understanding of what drives people in their life, Maslow’s work has inspired researchers since then. This theory has been thoroughly researched, criticized and modified by different researchers but in its essence, it remains universal. How this theory could be understood from the urban planning perspective, is discussed in section 2.5.

2.2.2.1 The Ladder of Needs

There have been many attempts to contextualize and update Maslow’s hierarchy of needs and one of the important revisions comes from Philosopher Alain de Botton as what he terms as the ladder of needs in his online book “The Book of Life” (Botton, The Book of Life). As figure 2-2 shows, the ladder of needs is divided into three subgroups; “core needs”, “comfort needs” and “flourishing needs”, and it is argued that the dominant system especially the capitalist system, has focused more on the core needs which are ephemeral in nature and do not ensure a lasting sense of contentment. Our cities have as well focused upon serving the core needs first, and while many societies have done well in doing so, others have not. We will eventually need to move up the ladder and address the comfort and flourishing needs of people, as the mere focus on the core needs has resulted in the society as we experience it today. “The challenge for the future is how can money and labour be made and employed towards the top of the pyramid. And if you'll

remember, the top of the pyramid is things like the need for connection, the need for community, the need for understanding” (Wilson, 2014).

Figure 2-2: The Ladder of Needs



Source: - The Book of Life (Botton, The Book of Life)

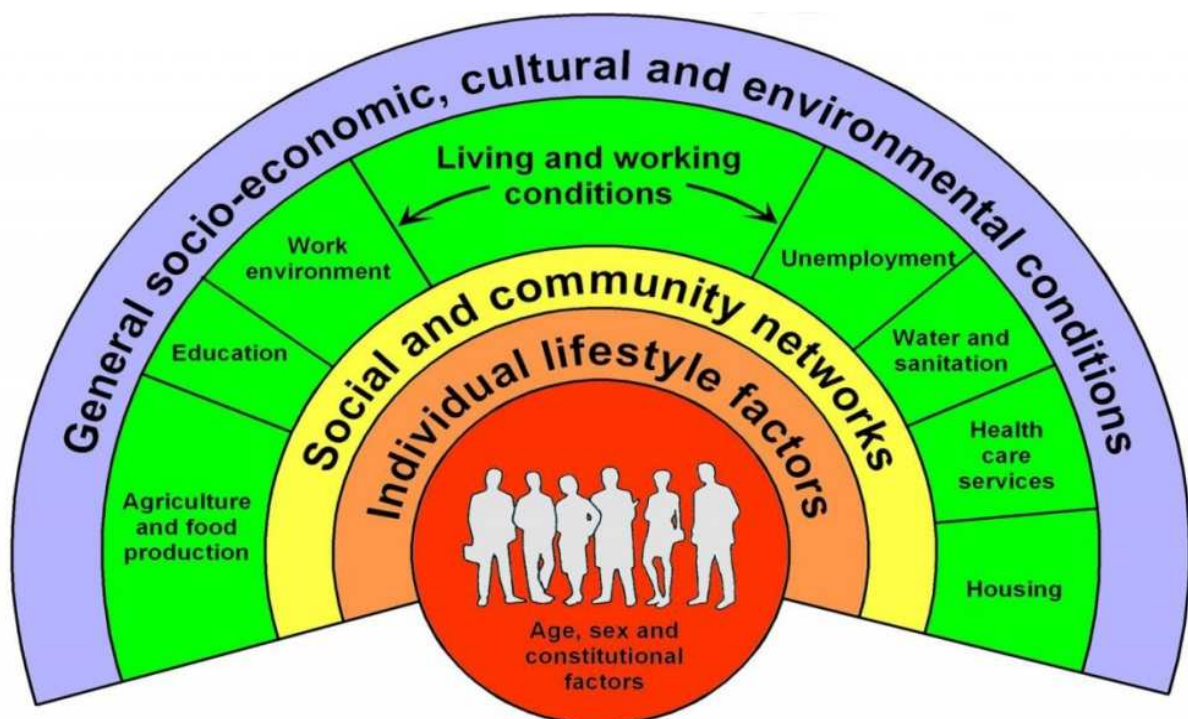
This holds true for cities as well, in addition to providing shelter, food, access to basic amenities and safety, cities need to transform themselves as the adobe of relationships, achievement, meaning, belonging and identity. Urban identity is dealt more in depth in the subsequent chapter 3.

2.2.3 Dahlgren Whitehead Rainbow model

Göran Dahlgren and Margaret Whitehead presented their “rainbow” model in 1991 that correlates individual health to socio-economics factors, and since its first presentation it has become one of the most popular models to understand how the living conditions and space around people impact individual’s health and wellbeing. Though this model was aimed at understanding factors that impact health, it might be extrapolated to understand wellbeing as well.

At the nucleus of this model are the subjective variables of an individual, such as age, sex, nutrition etc. which form the core of factors that determine and influence one’s health. Surrounding these factors are the individual life style factors such as smoking and drinking habits, exercise, food habits etc. which form the second layer of factors influencing health. The third layer of influencers consists of social and community networks, the interpersonal and social relationships which are proposed by many researcher as influencing wellbeing to a great extent (Putnam 1995); (Nations, 2016b). These factors are further surrounded by living and working conditions (such as

Figure 2-3: Dahlgren Whitehead Rainbow Model



Source: Dahlgren and Whitehead, 1991

work environment, education, employment, sanitation, health care etc.), and ultimately, by the overarching socio-economic and cultural atmosphere (such as religious beliefs, customs and practices, connection to nature, life outlook etc.). This model was revolutionary in the sense that

for the first time, it connected factors that are not (apparently) directly related to health, to the overall model thereby providing a comprehensive tool to understand and analyse factors influencing health and wellbeing. The Dahlgren-Whitehead rainbow model remains one of the most effective illustrations of health determinants, and has had widespread impact in research on health inequality and influences (Council, 2016).

It is evident from this model that various factors that affect one's health and wellbeing are related to the space where we live, such as environmental conditions, access to employment, health and educational facilities, safety etc. Cities influence many of these factors directly, and this model can be extrapolated to understand how cities determine the wellbeing of people. This is further discussed in section 2.5.

2.3 Measuring Wellbeing

If defining wellbeing is complex, measuring it is even more complex (Dodge, Daly, Huyton, & Sanders, 2012). To simplify this, researchers have tried to describe what wellbeing is and what it consists of, thereby providing an indirect way to quantify wellbeing. Subjective wellbeing (SWB), (which relates to an individual's experience) was the focus of the early attempts to measure wellbeing. Diener & Suh believe that SWB consists of three interrelated components, namely - life satisfaction, pleasant affects and unpleasant affects (Diener & Suh, 1997). Alain de Botton names five traits of a content person as, the sense of control over one's life, extrovert, sense of accomplishment, self-esteem and purpose in life (Botton, 2005). The World Health Organization has defined two key terms that are often related to wellbeing, 'Health' and 'Quality of Life'. Health is defined as "a state of complete physical, mental, and social well-being not merely the absence of disease" (Organization W. H., 2014, p. 1) and Quality of Life as follows:

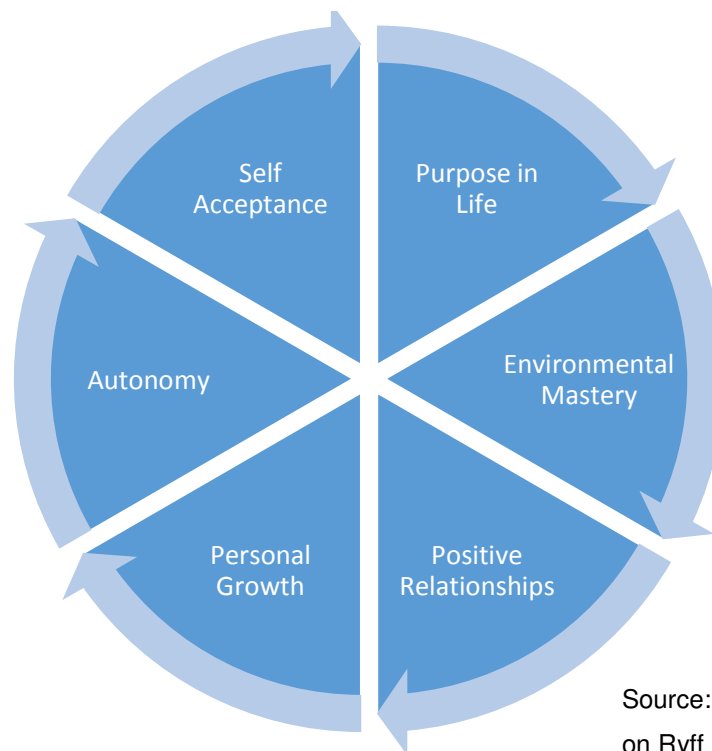
"WHO defines Quality of Life as individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment" (Organization W. H., 1997, p. 1).

These definitions have allowed us to understand what constitutes wellbeing, and by measuring and correlating them one can indirectly measure wellbeing. The ambiguity in defining wellbeing is aggravated by the usage of some of the popular terms such as 'satisfaction with life', 'happiness' or 'quality of life' interchangeably and often as equivalent to wellbeing itself. However, Quality of Life has to be understood as one of the (not as the only) contributing factors to wellbeing (Dodge,

Daly, Huyton, & Sanders, 2012). Similarly, it is argued that satisfaction with life should be treated as one of the constituents of wellbeing rather than being wellbeing in itself (Forgeard, Jayawickreme, Kern, & Seligman, 2011). Shah and Marks conclude that wellbeing is more than happiness as it means (for people) “developing their capabilities, fulfilling their potentials, and leading socially useful lives” (Shah & Marks, 2004).

Ryf and Singer in their influential article (Ryff & Singer, 2008) synthesized six core dimensions of personal wellbeing based on the analysis of various theoretical debates around wellbeing. Figure 2-4 is based on their findings.

Figure 2-4: Core Dimensions of Personal Wellbeing



Source: - By Author based on Ryff & Singer, 2008

Across all these descriptions, many themes and topics are same. Topics such as Purpose, Relationships, Physical as well as Psychological Health etc. are concurrent. All these descriptions provide a list of factors that determine wellbeing and can be used to cumulatively measure wellbeing. Section 2.5 in this chapter discusses these factors further. In the next section, some of the leading examples of how wellbeing measurement is being attempted is discussed.

2.3.1 OECD Better life index

The Organization for Economic Cooperation and Development (OECD) has developed an alternate way to measure the human wellbeing called “Better Life Index”. OECD has listed 11 important topics, a combination of which determine individual’s wellbeing. These comprise of the usual topics of income, health and life expectancy and additionally include wider topics namely, life satisfaction, community, civic engagement, work-life balance, environment, safety, housing, job, education. BLI is the relative order of importance of these 11 topics for a specific area i.e. either a region or country. The OECD has created an exclusive online platform

Figure 2-5: Better Life Index



where people from anywhere in the world can order their preference as they feel and the cumulative outcome given by the respondents from a specific area, forms the BLI for that area (OECD, 2015).

Figure 2-5 shows the better life index for Germany available on the OCED Better Life Index website (<http://www.oecdbetterlifeindex.org/responses/#DEU>) accessed on 21 November, 2016. It is clear from it that Life Satisfaction has been ranked as the highest priority while income (enhancing which often lies at the centre of our policies) is relatively lower ranked. The lower

ranking does not mean that people don't want these topics, it only means that people assign lower weightage to them as these are already present in abundance and there is lesser need to put them higher up in the priority order. This underlines the need to recalibrate prevailing policies, that are aimed at enhancing choices that are relatively ranked lower, to address this mismatch between expectation and practice. Different circles in the figure 2-5 represent different countries. Circles have different sizes and colours as well, as the size corresponds to the number of respondents from a specific country, while the colour corresponds to the topic ranked highest by the correspondent from that country. For example, Life satisfaction (represented by dark orange circle) is ranked highest in Germany, Poland, Italy, UK, Denmark and some other countries, while Health (represented by the purple coloured circle) is ranked highest in France, Spain, Austria and others and Environment (represented by the dark green circle) is ranked highest in Andorra, Safety (represented by the grey circle) is ranked highest in Slovenia, Education (represented by the light green circle) is ranked highest in Moldova and Income (represented by the light blue circle) is ranked highest in Ukraine and Albania. These circles also have different sizes for example the corresponding circles for Germany and France are bigger than those for Italy which is in turn bigger than one for Andorra; this denotes that there is a higher number of respondents from France and Germany than those from Italy, who in turn outnumber those from Andorra. However, it should be noted that Germany (80.6 million) and France (64.4 million) both have higher population in the year 2015 than Italy (59.7 million) while Andorra (70 thousand) has relatively very low population (Nations, 2015).

Better life index provides a glimpse into how people differ from one region to other in terms of their priorities for life and which factors demand our immediate action (Council, 2016). It can be used by respective countries to adjust their policies accordingly. This approach can be further extended to the city level to analyse their wellbeing. It further indicates that as nations get wealthier, the priorities of people start climbing up the hierarchy of needs (see figure 2-1) as evident from the highest ranked priority in Germany (GDP/Capita US\$ 41,936 for year 2016) being life satisfaction and in Albania (GDP/Capita US\$ 4,146 for year 2016) being income (Bank, 2017). However, among the nations with similar income levels and standard of living (for example Germany and France), though the highest ranked topic relates more to the higher levels of wellbeing, the relative priority of topics depends upon the context.

2.3.2 Gallup - Healthway Wellbeing Index (GWI)

The Gallup-Healthways wellbeing index is a major 2008 initiative by two leading private sector companies Gallup⁸ and Healthways⁹ to develop an index that “encompasses more than physical health or economic indicators” so as to “measure and study well-being so we can act efficiently and effectively to improve it: in individuals, for organizations and across geographies”. GWI has been developed by some of the leading experts in this research field for Gallup- Healthways and is based upon the extensive user perception surveys that these companies conduct annually. They define wellbeing as “a concept that captures the important aspects of how people feel about and experience their daily lives - in other words, well-being” (Healthways, 2014).

Table 2-1 explains five elements of wellbeing according to Gallup-Healthways. These elements are interrelated and interdependent. Factors beyond income and health are included to provide a more comprehensive picture of wellbeing. These factors are further broken into subcategories and GWI is constructed by conducting live interviews (over telephone and other mediums) of randomly selected representative samples (Inc. G. , 2009).

Table 2-1: Elements of Gallup-Healthways Well-being Index

Purpose	Liking what you do each day and being motivated to achieve your goals
Social	Having supportive relationships and love in your life
Financial	Managing your economic life to reduce stress and increase security
Community	Liking where you live, feeling safe, and having pride in your community
Physical	Having good health and enough energy to get things done daily
<i>Source:</i> - Based on (Inc. & Healthways, State of Global Well-being, 2014)	

GWI is another representation of wellbeing based on intensive sampling of public assessment of their subjective wellbeing.

2.3.3 Gross National Happiness (GNH)

Bhutan, a small landlocked Himalayan nation is the pioneer in adopting a comprehensive policy guideline framework to measure nations’ progress called “Gross National Happiness”, way before any other nations initiated this process and since then it has inspired many nations and research institutes in the research related to wellbeing. Coined in 1972 by then King of Bhutan, GNH comprises 33 indicators collected under nine domains. These indicators and domains “aim to

⁸ Gallup Inc. - It is an American research based performance management company and carries out various opinion surveys

⁹ Healthways - It is an American wellbeing improvement company

emphasize different aspects of wellbeing and different ways of meeting the underlying human needs” (Research, 2016). The nine domains of GNH are Psychological wellbeing, Health, Education, Culture, Good Governance, Community Vitality, Ecological diversity and Resilience, Living Standard and Time Use. Table 2-2 shows the list of 33 indicators categorised in the various domains.

Table 2-2:- Indicators of Gross National Happiness

S.No	Domain	Indicator
1	Psychological wellbeing	Life Satisfaction
		Spirituality
		Positive Emotions
		Negative Emotions
2	Health	Self-Reported Health Status
		Healthy Days
		Disability
		Mental Health
3	Education	Literacy
		Schooling
		Knowledge
		Value
4	Culture	Speak Native Language
		Cultural Participation
		Artisan Skills
		Code of Etiquette and Conduct
5	Good Governance	Government Performance
		Fundamental Rights
		Services
		Political Participation
6	Community Vitality	Donation (time and money)
		Community Relationship
		Family
		Safety

7	Ecological diversity and resilience	Ecological Issues
		Responsibility towards environment
		Wildlife damage
		Urban issues
8	Living Standards	Asset
		Housing
		Household Per Capita Income
9	Time Use	Work
		Sleep
Source: - by Author based on the work report by Centre of Bhutan Studies and GNH (Research, 2016)		

Table 2-2 shows that the measurement of wellbeing has a deeper connection to almost every aspect of life including how is the work life balance and for how many hours are people sleeping. This highlights the complexity in measuring wellbeing and indicates to the sheer amount of data that is needed to prepare a comprehensive and representative index. It is significant from the urban planning perspective that this index incorporates many factors that are directly influenced by urban planning and breaks them further into subcategories; which allows to analyse on which domains, cities have to focus on to enhance the wellbeing of its residents. It also provides a yardstick to measure how many aspects of wellbeing are addressed by a certain policy and which additional aspects may need to be incorporated into it.

2.4 PERMA

This research has significantly used the description of wellbeing as given by Positive Psychologist Martin Seligman in his influential book 'Flourish', to define what constitutes wellbeing and it has been further used to select the components of wellbeing in the subsequent sections 2.5 and 2.6. From that perspective, this is the main theoretical concept upon which the construct of collective wellbeing used in this research is based, along with the additions from all other concepts discussed in this and subsequent chapters. Seligman argues that there are five major factors determining one's wellbeing in life (Seligman, 2011). These factors are:

P – Positive Emotions – “Positive emotion is more than just ‘happiness’. There is a range of positive emotions, including amusement, awe, compassion, contentment, gratitude, hope, interest, joy, love, and pride. Some of our capacity for experiencing positive emotions is inherited but we do have capacity to purposefully experience more positive emotion” (Seligman, 2013). The

daily experience in a city or space can contribute significantly to one's positive emotions and space can have intrinsic value to enhance these emotions (Lalli, 1992, p. 288).

E – Engagement – It is about using one's signature strengths. Seligman highlights that it is important for one to first understand his/her main strength and how to access it and, secondly, to work in the fields that maximize these strengths which finally leads to enhanced performance and happiness (Seligman, 2013).

R – Relationships – It relates to the personal as well as social relationships that one fosters over time with friends, family, society and people at large. Social networks directly affect individual's physical and mental health and wellbeing (Rath & Harter, 2010). Seligman argues that "the balance between positive (relationships) and negative should be a healthy one, where the positive outweighs the negative" (Seligman, 2013). Based on this, cities need to provide a supportive ambience for relationships to form and flourish.

M – Meaning – It stands for meaning and purpose in life, "belonging to and serving something that one believes is bigger than the self. Homo sapiens as a species has survived and flourished because of our ability to work and innovate as a group" (Seligman, 2013). These meanings are often altruistic and provide us a sense that our life has a bigger purpose that goes beyond self. Seligman argues that this sense of meaning comes when we do something that matters to others. Which in turn make us feel our lives as more worthy and meaningful (Seligman, 2011). This can be related to the participation, engagement and association in case of city.

A – Accomplishment – It is the sense of accomplishment or achievement, mastery and competence (Seligman, 2013). Seligman argues that accomplishment is often pursued for its own sake, like "winning for the winning's sake" and often drives people to do things in life. It may be related to positive emotions, relationships and meaning in life but those are more of the side effects of accomplishment not the objective. In this regard cities can foster ample and equal access to opportunities to everyone.

PERMA provides a very deep understanding of what defines individual's wellbeing, the very minute factors that form the core of human actions and outlook to the life, and by measuring these factors, public policies can be designed to create a supporting atmosphere for people to flourish. PERMA provides a strong theoretical ground for forming policies which can be then be further turned into programmes relating to the indicators proposed by the Gross National Happiness and which in turn can then be implemented as projects in the sectors as specified by the OECD Better Life Index. All the aforementioned descriptions as well as measurements of wellbeing address

wellbeing at different levels. This research borrows from all these (especially from the three measurements of wellbeing discussed in this section) to derive the major attributes of collective wellbeing and further describes them from the urban planning perspective.

2.5 Attributes of Collective Wellbeing

Based on the previous sections, the attributes of collective wellbeing are listed and elaborated in this section. Each of these attributes stand for one or more specific aspects of wellbeing and are aimed at translating these aspects from different disciplines to urban planning. For example, 'Positive Emotions' is a recurrent theme among various measurements and descriptions of wellbeing. In order to incorporate it into urban planning, factors promoting positive emotions such as engagement and participation are listed and then these factors can be addressed through urban planning. Hence Positive Emotion gets translated into urban planning through engagement and participation. Table 2-3 provides the list of attributes and the specific aspects of wellbeing. These attributes are based upon the commonality across all three measures of wellbeing discussed earlier and the theories related to wellbeing analysed in the earlier sections of this chapter. These attributes are grouped along the major areas of policy interventions, so that these can be further used to strengthen policy formulation. The objective is to provide a clear and tangible understanding of wellbeing from a spatial perspective in order to assist policy formulations which can further lead to implementable programs and actions.

Table 2-3: Attributes of Wellbeing

Attribute	Major Aspects of wellbeing related to it
Participation and Engagement	Positive Emotion
	Accomplishment
	Satisfaction with Life
	Meaning
	Relationship
	Belongingness
Access	Quality of Life
	Positive Emotion
	Meaning
	Relationship
	Work -Life Balance
Identity	Meaning

	Belongingness
	Relationship
	Satisfaction with Life
Safety (Financial, Social and Environmental)	Accomplishment
	Satisfaction with Life
	Positive Emotion
	Work-life Balance
Source: - by Author based on literature research	

These attributes are discussed in the following section.

2.5.1 Participation and Engagement

Participation and Engagement are clubbed together to form what can be termed as the axis of wellbeing in cities. Various researchers have long argued that those who participate more often in events beyond family and form meaningful links have higher SWB (Putnam, 1995). These avenues of participation could be political, social, religious or any other group that could be formed due to the critical size that a city offers (Schwab, 1992). For example, the quote below of “Bowling Alone” by Putnam clearly highlights the role that going to Church plays in enhancing the wellbeing.

“Churches provide an important incubator for civic skills, civic norms, community interests and civic recruitment. Religiously active men and women learn to give speeches, run meetings, manage disagreements, and bear administrative responsibility. They also befriend others who are in turn likely to recruit them into other forms of community activity. In part for these reasons, churchgoers are substantially more likely to be involved in secular organizations, to vote and participate politically in other ways, and to have deeper informal social connections” (Putnam, 1995).

Other research also state that religious people tend to be happier (Diener & Seligman, 2016). Religious places are one of the many avenues of participation that cities offer. Cities that more avenues for people to participate and keep them engaged often report higher satisfaction, better quality of life and wellbeing among its residents (Project, 2015).

2.5.2 Access

This denotes equality in opportunities for everyone in a city to have access to basic amenities such as housing, health, education etc. This term has a very wide range and incorporates a vast majority of practices that form the focus of contemporary urban planning such as adequate housing, health services, educational facilities, recreation facilities, transport etc. Access can be directly related to the notion of “Quality of Life”. It also relates to the concept of ‘Equality’ which

aims at minimizing income inequality. It has been argued that a more equal society has higher SWB, as Ed Diener and Louis Tay state:

“Another implication of our findings is that need fulfilment, needs to be achieved at the societal level, not simply at the individual level. Although Maslow focused on individuals, we found that there are societal effects as well. It helps one’s SWB if others in one’s nation have their needs fulfilled. For instance, it is important to a person’s life evaluations if others in the society have their basic needs met, beyond an individual’s fulfilment of his or her own needs. Country-level need fulfilment, especially country basic need fulfilment, had a sizeable association with life evaluations. The findings indicate that improving individual life must include improving societies” (Tay & Diener, 2011).

By providing enhanced and equal ‘Access’ to all citizens, cities create an atmosphere where people can flourish. This also abates other attributes such as safety.

2.5.3 Identity

Identity relates to the higher level of Maslow’s hierarchy of needs. This enables people to attain what Alain de Botton called as flourishing needs in the Ladder of Needs (see section 2.2.2.1). Identity in this context stands for the sense of belongingness, ownership, responsibility, association and others. It is not a standalone attribute and is formed along with other attributes. Identity provides the sense of meaning to everyday life in cities and brings positive emotions. It allows people to form social relationships as well as the relationship with the city itself. This notion is further discussed in the next chapter “Urban Identity”.

2.5.4 Safety

Along with Access, Safety forms the core of contemporary urban planning. Safety in this context stands for financial, social and environmental safety. It encompasses factors such as meaningful and remunerative employment, financial wellbeing, work-life balance, protection from crime, trust and relationship with nature. Safety forms the basis for all other attributes to function effectively.

2.6 Wellbeing in Practice

Though the concept of wellbeing is relatively unexplored from the urban planning domain, its various components have long been driving and shaping planning policies. One of the objectives of this research in studying wellbeing in such a depth, is to provide wellbeing as an umbrella concept under which these various concepts can be correlated and coordinated. In this sense wellbeing serves as the overarching theoretical concept. This section discusses some of the prominent components of wellbeing that are currently being represented or discussed by

stakeholders across the world in various forms. While some of these are directly related to wellbeing others are indirectly related, but understanding them together allows us to appreciate the larger and more tangible contemporary face of wellbeing.

2.6.1 Sustainability

Sustainability is one of the most influential words in the contemporary debates, to the extent that UN declared it to be the main driver of all future goals. The SDGs or Sustainable Development Goals¹⁰ were adopted by the UN in 2015 as a response to the looming crisis of Climate Change as well as challenges such as poverty, hunger, abysmal health conditions, violence and others. Sustainable development was defined as “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs” by the World Commission on Environment and Development (Brundtland Commission) in 1987 (Europe, 2016). The goal number 11 of SDG specifically deals with city. It calls to “make cities inclusive, safe, resilient and sustainable” (Nations, 2016a).

Sustainability is closely related to wellbeing to the extent that it is often understood as ‘wellbeing’ from the urbanisation perspective. Policies aimed at creating a sustainable world also enhance its wellbeing. Sustainability caters to most of the components of wellbeing including Access, Safety and Participation.

2.6.2 Earth Jurisprudence

The concept of Earth Jurisprudence is “based on the concept that the planet and all of its species have rights— and that they have those rights by virtue of their existence as component members of a single Earth community?” (Bell, 2003). It stands for treating nature and all other being as stakeholders, and human (being) are among them. This concept is becoming more popular especially in the field of law and is used to grant rights to nature over its resources. It is becoming a popular tool to limit anthropogenic changes especially related to the exploitation of resources. Ecuador and Bolivia are leading examples in this field where they have adopted the ideas of Earth Jurisprudence into their constitutions. It is called ‘*Buen Vivir*’ in Spanish in Ecuador and reads as “We ... hereby decide to build a new form of public coexistence, in diversity and in harmony with nature, to achieve the good way of living.” and describes a way of doing things that is community-centric, ecologically-balanced and culturally-sensitive (Balch, 2013). Other nations are adopting this concept as well and among the more advanced economies of the world, New Zealand is

¹⁰ SDG or Sustainable Development Goals are a set of 17 Goals with 169 sub-goals that are adopted by the UN in 2015 and aim at transforming the world by 2030

considering to award a River rights equal to its citizen (Calderwood, 2016). This concept supports wellbeing and the sustainability of the planet for all.

2.6.3 Rights to City

This concept was first developed by French Urban Sociologist Henri Lefebvre in his book *Le droit à la ville* published in 1968. It was based on his observation of the access to city by the marginalized classes of society and how their socio-economic condition is reinforced by the city, through planning mechanism such as land use, gate community and zoning. He called the right to city as “a right of no exclusion from the urban society”.

David Harvey in his review of Henri Lefebvre’s concept of right to city summarises it as:

“The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights” (Harvey, 2008).

This marginalization and therefore the right to city can be further applied at the global scale as Purcell argues that “the growing power of capital and its pursuit of neoliberalisation will increasingly disenfranchise the mass of people, excluding them from the decisions that determine the course of globalisation” (Purcell, 2002). Right to city conceptually deals with the very fundamental correlation between individual, space, society and wellbeing (as shown in figure 1-2). It defines the relationship between people and city (as space) and how this relationship can be changed by changing other control variables such as urban planning and economics. The idea of right to city is very fundamental to the idea of wellbeing in cities as it connects many of the attributes of wellbeing including participation and access.

2.7 Wellbeing and Urban Planning

Jane Jacobs famously wrote “cities have the capability of providing something for everybody, only because, and only when, they are created by everybody” (Jacobs, 1961). This is the idea of democracy at the very urban level, ‘for the people, by the people, to the people’. This section looks at how these different descriptions and measurements of wellbeing can be seen from an urban planning perspective. Section 2.5 (Attributes of Wellbeing) and 2.6 (Wellbeing in Practice) provide a gradual transition from the understanding of wellbeing from different disciplines to urban planning. While attributes of planning highlight major policy areas which have to be addressed to

enhance wellbeing, section 2.6 provides a brief look at different aspects that are directly related to wellbeing and are in the focus of contemporary debates about the city.

The debate about wellbeing may be new but the notion itself has long been inspiring urbanists and researchers alike, from the Garden Cities of Ebenezer Howard to Jane Jacobs and UN Habitat and Smart Cities now. It advocates certain central attributes such as participation, relationship, health, safety that need to be incorporated into our daily life to enhance subjective and community wellbeing. Cities being the ground where all this happens, need to provide conditions for these to foster. Jane Jacobs famously argued for cities to be denser, have 'Human Scale' and 'Short Blocks' which can form new contacts and foster relationships, promote local economy and assimilate residents. She devoted a lot of attention to the importance of sidewalks and how they are vital for a city to flourish (Jacobs, 1961). This can be termed as Jane Jacob's guide to transform cities from the mere engines of economy as they are seen in the neo-liberal world, into an adobe where financial safety is one of the many offerings of a city.

Urban planning policies and practices are categorized into three major groups based on their objectives and focus areas, which might help in determining at what level a particular policy or programme is functioning and at what level these may be needed.

Standard of living – These are the policies that impact access and safety attributes of a city. These are related to the adequate provisions of basic amenities such as water, housing, sewage, drainage, education facilities, health facilities, public transport etc. These cater to the survival needs that are essential for a society's subsistence. It is the basic layer which is fundamental for any urban area to function. There is a big mismatch at this very level across the globe, as many cities still struggle to provide a majority of these amenities and facilities to their populace while some cities have gone beyond to the next level.

Quality of Life (QoL) – This is the next level which can be attained normally after the adequate provision of standard of living. Policies at this level address concerns that are beyond the survival needs, for example aesthetics, harmony, relationship with the immediate nature etc. QoL is a layer of values additional to the standard of living. For example, having access to green space is part of standard of living but a park being well landscaped with a fountain, falls into QoL.

Wellbeing – This is the top level for a city which is built only upon the accomplishment of two previous layers of standard of living and quality of life. At this level, policies are directed more towards the intangible areas of a city such as fostering relationships and strengthening identity. From the neighbourhood park perspective, wellbeing in this sense means having a personal

relationship with that park which forms one of the several bricks of urban identity for an individual. The ability of space to nurture these relationships is the wellbeing component.

All these layers are overlapping and their boundaries are often blurred. Some needs transcend across layers, depending upon their context. For example, while water pollution is an immediate concern for standard of living, noise pollution can be a concern for quality of life while visual pollution (visual tension) can be a concern for wellbeing. As things become more and more subjective, they often tend to move higher up the ladder.

2.7.1 New Urban Agenda and Wellbeing

The New Urban Agenda (NUA) or the Quito Declaration was adopted by the UN on 20th October 2016 as the outcome document of Habitat III conference. Habitat III or United Nations Conference on Housing and Sustainable Development is the UN Habitat's signature conference that takes place every 20 years and aims to streamline the process of urbanization across the globe for the next 20 years. Its outcome document is the single most influential and important policy guideline that has a great potential to change the way our cities are.

From the perspective of wellbeing, NUA is a very positive and paradigm changer document. It clearly states the need for urbanization to incorporate all the three elements of Standard of Living, Quality of Life and Wellbeing. This emphasis is evident from table 2-4 which highlights that sustainable development forms the core of NUA (which is mentioned 141 times in the document). Table 2-4 contains words relating to all the three groups of urban planning policies mentioned in the section above.

Table 2-4:- Wellbeing and New Urban Agenda

Term	Number of times mentioned in NUA
Sustainable	141
Public	47
Safe	44
Inclusive	35
Participation	20
Cooperation	18
Public Space	09
Culture	09
Integration	08

Well-being	05
Quality of Life	05
Diversity	05
Source: - by author based on (Nations, 2016b)	

NUA calls urbanization “an engine of sustained and inclusive economic growth, social and cultural development, and environmental protection”, and underlines its potential contributions to the achievement of “transformative and sustainable development” (Nations, 2016b, p. 3). This goes beyond the narrative of cities being the mere engines of economy and relates closely to the notion of cities as an adobe of wellbeing. It clearly states the need to provide basic amenities and services such as adequate housing, water, sanitation, access to education and health facilities and more, all that is termed under Standard of Living in the section above (Nations, 2016b, pp. 4, 5, 7,11,15,16). It further states the importance of culture and cultural diversity in the sustainable cities, advocates for the “right to city” and “human rights”, to enhance the sense of belongingness and ownership of the city, to make cities inclusive and many other aspects that relate to Quality of Life and Wellbeing (Nations, 2016b, pp. 4, 5,6,8,9,10,11,12,14,15). NUA provides guidelines on how to achieve them, especially at the policy formulation and institutional levels (Nations, 2016b, pp. 13,17,18,21,22). It highlights the importance of society in cities, calling it fundamental for sustainable development and advises cities to “promote...well-connected and well-located housing, with special attention to the proximity factor and the strengthening of the spatial relationship with the rest of the urban fabric and the surrounding functional areas” and “to strengthening social cohesion, intercultural dialogue and understanding, tolerance, mutual respect, gender equality, innovation, entrepreneurship, inclusion, identity and safety, and the dignity of all people, as well as to fostering liveability and a vibrant urban economy” (Nations, 2016b, pp. 6,7,8). It further calls upon cities to provide not only access to employment but to productive employment and decent work for all. These minor additions are the significant value additions that promote a city from Standard of Living stage to Quality of Life stage and then to the Wellbeing stage. These relate closely to what Alain de Botton in Ladder of Needs called as ‘Flourishing Needs’ (Section 1.3).

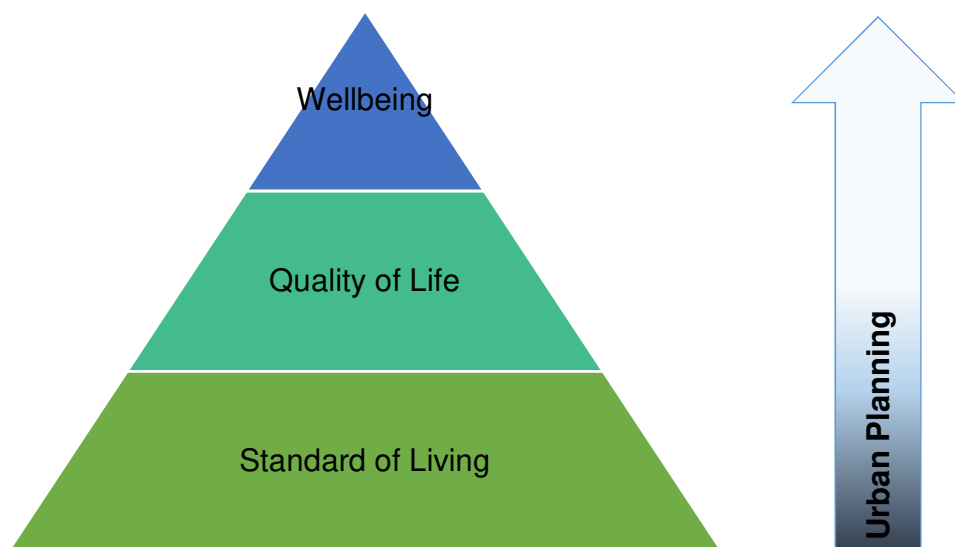
It highlights the importance of wellbeing of people by asking cities to “foster(ing) sustainable economic development and protecting all persons’ well-being and quality of life through environmentally sound urban and territorial planning, infrastructure and basic services” (Nations, 2016b, p. 10). One of the ways suggested to achieve this is by having “a social mix through the

provision of affordable housing options with access to quality basic services and public spaces for all” and by “considering the human scale, and measures” (Nations, 2016b, p. 14). It serves as strong justification as well as guideline for this research. This further serves as “an evidence based and practical guide for the implementation of NUA” that it calls to be prepared by all relevant stakeholders (Nations, 2016b, p. 17)

2.8 Conclusion

In this chapter, the notion of wellbeing has been discussed from the perspective of different disciplines, which is then subsequently translated into the understanding of wellbeing from the urban planning perspective. Various attributes as well as policy focus areas pertaining to cities can be classified under three broad categories namely, (those pertaining to) Standard of Living, Quality of Life and Wellbeing (see figure 2-6) which relate to different theoretical realms discussed in this chapter.

Figure 2-6: Wellbeing and Urban Planning



Source: - by Author

It is evident from NUA that many of our policy interventions are aimed at the improvement of the standard of living. This is relevant given that still more than one out of ten humans lacks access to toilets and lives in abject poverty (Leary, 2016); (Organization W. T., 2016). It is also evident that NUA pushes forward the call to improve the Quality of Life in our cities and ferociously advocates for making them sustainable. From the wellbeing perspective, it can be argued that very few of our policies are directly addressed at fostering wellbeing. For those countries in the

world that have gone beyond providing standard of living, people are facing loneliness and stagnant satisfaction with life despite more than threefold increase in the per capita GDP and income (Myers & Diener, 1996); (Hamilton, 2003). This is due to the fact that the policies aimed at improving both Standard of Living and QoL have their limitations. Therefore, policies that target the top most level of the pyramid (wellbeing) are equally needed. These policies call for structural changes in cities and need to be conceptualized and implemented from the very beginning to be effective. In the last chapter, this point is further discussed using the case study from Essen, Germany.

Based on the analysis of NUA, it can be argued that urban planning policies tend to follow the hierarchy as shown in figure 2-6. It denotes that while Standard of Living is the primary focus of urban policies, some policies subsequently aim at addressing the Quality of Life aspects of cities as well while few have outreach to those aspects that can foster wellbeing. This research aims to enable policy makers and researchers in formulating policies that cut across all the three categories of policies. In the subsequent chapters, a particular attribute of wellbeing, urban identity, is discussed with the aim of understanding that how it can (be used to) complement the notion of wellbeing.

References Chapter 2

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Chapter 3 Urban Identity

Identity is very central to our existence. It helps us in defining who we are. As people have their individual identities, space has its own identity as well (Lynch, 1960), and this identity of space influences its residents. Identities are “complex and multi-layered” to say the least (Hecht, Jackson II, & Pitts, 2005). The larger narrative of urbanisation post industrial revolution used space in a piecemeal way where individual needs were aligned to conform to the larger driving force of production and consumption (Harvey, 2007). As the central force behind cities across the globe become more congruent, cities across the world started looking similar (Greefield, 2016). Very different to this homogenizing factor, urban identity focuses on finding what makes a particular area unique, or simply what makes it, what it is for its resident. It is argued that “urban related identity fulfils residents with positive self-esteem” as well as provides a uniqueness to the place, making it different from other places and making residents feel different from residents of other places (Lalli, 1992, p. 293). The research on urban identity received very positive support in the WBGU (German Advisory Council on Global Change) 2016 report, that proposes the concept of *Eigenart* (which can be translated as character or identity in English) and states that “the dimension of *Eigenart* is to stress that urban spaces are not interchangeable containers, and cities do not consist mainly of material ‘things’ like infrastructures and buildings. Rather, the focus is on how urban life and urbanity evolve through the thinking and actions of the people who live there” (WBGU -G. , 2016a, p. 142).

This chapter examines the theoretical understanding behind the notion of urban identity including its various attributes from the urban planning perspective and identifies ways to measure them empirically. Being an attribute, urban identity complements wellbeing and a change in one can impact the other. This complements the objective of this research which explores the ways of improving wellbeing of a particular space by addressing its identity.

3.1 Understanding Identity

The notion of urban identity is primarily based upon the concept of identity as dealt with in psychology and sociology. There are two distinct identities (in addition to other categorisations); personal identity which deals with the question of the identity of an individual such as who am I and what makes a person who he/she person is? And social identity which deals with (for example) what makes a group distinct and unique. The theoretical understanding of this chapter is based mainly upon three works; first the understanding of ‘Social Identity’ based on the work of

Henri Tajfel (who was a pioneer in this field), second 'the Sense of Space' based on the work of Kevin Lynch and third the concept of *Eigenart* as proposed by the WBGU (WBGU G., 2016b) as well as concept of wellbeing as highlighted in the NUA. This research also draws significantly from the empirical works done in Germany by Marco Lalli and the concept of the production of space and right to city as proposed by Henri Lefebvre (Lefebvre, 1991); (Harvey, 2008).

The Oxford English Dictionary describes identity as "the fact of being who or what a person or thing is" (Press O. U., 2016) and the Cambridge English Dictionary describes it as "who a person is, or the qualities of a person or group that make them different from others" (Press C. U., 2016). Some social scientists have argued that "... identity is a modern formulation of dignity, pride, or honour that implicitly links these to social categories" (Fearon, 1999). Researchers have argued that urban identity is too complex to define, despite various attempts to understand similar concepts such as "Place Identity", "Sense of Place", "Place Dependence", "Attachment to Place", "Regional Identity" and "Rootedness" (Lalli, 1992). These are various concepts that researchers from different disciplines such as environmental psychology, sociology, urban geography have proposed as tools to understand the identity of a place. The concept of Social Identity as proposed by Henri Tajfel offers a theoretical background to the identity of residents of a particular city. Tajfel (Tajfel & Turner, 1979, p. 40) summarises it as:

"we can conceptualize a group, in this sense, as a collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership of it"

The key words that Tajfel used to conceptualize a group are: share, same, involvement, common, achieve, social, consensus and evaluation. These are the main attributes upon which Social Identity is built and they serve as the parameters for analysing if a specific individual identity can be compatible to a specific social identity. The understanding of identity from an urban planning perspective was elaborated by Kevin Lynch in his books *Good City Form* and *The Image of the City*. These are discussed in the following sections, along with the various elements that together construct urban identity. The WBGU report (WBGU G., 2016b) highlights the importance of the concept of *Eigenart*, which is a German word and can be broadly translated as character/identity in English. It calls *Eigenart* as the balancing factor in organic as well as blue print urban development and states that by properly addressing the *Eigenart* of cities, the new cities that are growing everyday across much of the developing world can provide some natural balance to otherwise "unstructured, quasi-automatic, urbanization" (WBGU G., 2016b). It defines *Eigenart* in

two different ways, descriptive and normative. The descriptive *Eigenart* “comprises all that is typical of every particular city. This can be described on the basis of its socio-spatial and

Table 3-1: Factors determining the sense of a Settlement
Spatial Form and Quality
Culture
Temperament
Status
Experience
(Current) Purpose of Observer
Structure
Source: - by Author based on (Lynch, <i>Good City Form</i> , 1981)

constructed environment, its socio-cultural characteristics and urban practices”. WBGU defines the descriptive *Eigenart* of urban areas as “urbanity as a whole, i.e. the ‘face’ of a city, which has both evolved historically and been created by everyday urban practices” and the normative *Eigenart* emphasizes “the need for

socio-cultural diversity in and of cities and the autonomy of city residents in the creation of urban quality of life and cultural identity” (WBGU -G. , 2016a, p. 142). The WBGU report differentiates the two approach by highlighting the difference in how they take place, the descriptive *Eigenart* defines urbanity as a dynamic process while the normative concept of *Eigenart* is based on the concept of the right to city i.e. participation and inclusion.

3.2 Attributes, Layers and Dimensions of Identity

Kevin Lynch in his famous book *Good City Form* discusses what he calls the ‘sense of a settlement’ which he describes as “the clarity with which it can be perceived and identified and the ease with which its elements can be related with other events and places” (Lynch, 1981, p. 131). Lynch calls identity as ‘*a sense of place*’. Identity is the “extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, or unique or at least a particular character of its own” (Lynch, 1981, p. 131). He lists seven important factors on which the sense of a place depends, listed in table 3-1.

Lynch argues that depending upon how these factors are mixed, same places can be experienced differently by different people while the same person can experience different places differently. However, “there are some significant and fundamental constancies in the experience of the same place by different people. The constancies arise from the common biological basis of our perception and cognition, certain common experiences of real world (gravity, inertia, shelter, fire and sharpness to name a few) and common cultural norms that may be found in those who habitually use any particular place” (Lynch, 1981, p. 131). This underlines the commonality in the

way we experience a particular space due the factors that are common among all human beings who frequent a particular area. Lynch also highlights the importance that culture plays in shaping the sense of place for people. Lynch further states that “place identity is closely related to personal identity”. On how to measure the identity of a place, Lynch suggests to use the “simple tests of recognition, recall and description” of a place to measure the crude identity (Lynch, 1981, p. 132).

In his landmark book *The Image of the City*, Lynch names three components that form the image of city; namely identity (the identification of an object, which implies its distinction from other things, its recognition as a separable entity), structure (the image must include the spatial or pattern relation of the object to the observer and to other objects) and meaning (this object must have some meaning for the observer, whether practical or emotional); (Lynch, 1960, p. 8). He wrote extensively about the image of a city which he calls is formed by “the overlap of many individual images”. The contents of city image referring to its physical form are classified into five elements by Lynch i.e. Path, Edge, District, Node and Landmarks (Lynch, 1960, pp. 46-48).

Within urban identity there can be two distinctions. Lalli argues that there are two aspects of identity, first the identity of location itself and second the relationship of an individual with a place and calls the later “urban related identity” (Lalli, 1992). This is similar to the notion of normative *Eigenart* suggested by the WBGU. This research follows this notion of urban related identity (called urban identity) which is based as the collective construction of subjective relationships to a specific location. Within a city, Lalli further divides identity at two levels, first the “identity of the town as a whole that serves more global function” and which is not necessarily derived from local action and second the identity of a part or neighbourhood in city that “has a specific social, economic and aesthetic identity which serves to differentiate simultaneously the positive self-definition of its residents from all other town inhabitants” (Lalli, 1992, p. 293). Through the analysis of the three neighbourhoods in Essen, this research examines how similar or different these identities are from each other and how they can contribute to the wellbeing of city of Essen (discussed in Chapter 6).

Some communication theorists have highlighted the layered nature of identity. These main layers of Identity which are interrelated, are described in the table 3-2.

Table 3-2: - Layers of Identity

Layer	Description
Personal Layer	Individual as the locus of identity: Self-image, self-concept, feelings about self, spiritual sense of self-being etc.
Enactment Layer	Interaction as the locus of identity: performance w.r.t. others
Relational Layer	Relationship as the locus of identity: social interaction, relationships w.r.t. others etc.
Communal Layer	Identity as existing within a group
Source: - by Author based on (Hecht, Jackson II, & Pitts, 2005)	

These layers of identity function in continuation from a person to the entire group, thereby changing at each interface. In the personal layer, the individual is at the centre of it while the next two layers, Enactment and Relational layers, are the transitional layers which shift the focus of identity from the individuals to a collective one, which forms the communal layer of identity. This transition of identity allows to derive the urban identity as a cumulative of individual identities.

Identity as discussed above is made of layers and can be influenced by different factors, either positively or negatively. In his works Lalli (Lalli, 1992) highlights factors that impact the “urban related identity” significantly, these factors or elements are listed in the table 3-3.

Table 3-3:- Elements that enhance urban identity

Elements	Type of impact
Land/Flat Ownership	Positive
Place of birth	Positive
(Social) Relationships	Positive
Quality of Life	Positive
Noise	Negative
Landmarks	Positive
Duration of Stay	Positive but not very significant
History	Positive (not always)
Aesthetics	Positive
Source: by Author based on (Lalli, 1992)	

Land ownership has a more positive impact on the identity of place for a citizen than flat ownership which in turn impacts more positively than those who don't own either, “ownership of land exerts

even stronger influence (on the urban related identity) than owning a flat” (Lalli, 1992, p. 289). Similarly, the place of birth has a positive impact on the identity though the impact of duration of stay is not that strong. Elements that Lynch highlighted as the main creators of the image of city such as landmarks are found to have a positive impact on identity by Lalli as well. Similarly, the quality of life (amenities and facilities), the history of place and its aesthetics (visual form and appearance) strengthen the identity of a space. Most of the negative factors, such as pollution and noise have a negative impact on the identity of the space.

Based on this, Lalli named five dimensions of urban related identity (see table 3-4).

Table 3-4:- Dimensions of Urban Related Identity

Dimension	Description
Evaluation	Evaluative comparison between own town and others; uniqueness and special character
Continuity	Subjective temporal continuity; relation with one’s past, personal experiences
Attachment	The sense of being at home; belongingness or rootedness
Familiarity	Everyday experiences; Orientation in the town
Commitment	Significance of town for personal future; willingness to stay put
Source:- by Author based on (Lalli, 1992)	

These dimensions can be seen as various attributes that jointly shape an individual’s perception about the identity of a space. What makes a specific place of residence unique from other places, helps its residents to take pride in it and distinguish it from other place as well which is the corner stone for identity formation. Its lack in contemporary new cities is evident from the fact that many of these (cities) look very similar irrespective of their local context (Greefield, 2016). Continuity is related to indicators such as place of birth and duration of stay and indicates that relationship with space is based upon personal experiences and stories. As more and more people migrate from one place to another, continuity remains an important but often diminishing factor. In Chapter 5 nationality, duration of stay and place of birth are analysed along with other demographic factors to understand these dimensions of the case study areas.

Familiarity is one aspect of urban identity that everyone experiences by the virtue of staying in a place. It is the day to day experience of a city in its physical and social form. It can be summed up as the cumulative experience based on how we perceive the physical form of city (consisting

of streets, buildings etc.) as well as others whom we come across in daily life. It is often argued that cities due to their high density and heterogeneous nature, tend to diminish familiarity as compared to villages where due to the small and often homogenous population, people tend to be more familiar with each other (Schwab, 1992). The sense of belonging to a place (which is one of the attributes of familiarity) is very important in defining identity as it forms the most recognisable aspect of urban identity. When does a migrant become the resident of a city, after fulfilling the legal requirements or staying over a certain time period or following the social norms? These factors are very contextual and vary from one place to another. But certain cities are more accommodating and welcoming than others and allow the migrant to feel sooner at home than later. This ability to call oneself as belonging to a certain place provides a tangible face to urban identity and can be measured using auxiliary indicators such as the level of participation in social functions, voting, mind mapping etc.

Commitment is the tendency and willingness of an individual to continue staying in a specific place. It is formed by several factors including how the future of the individual and the city are intertwined (the outlook of the place), specific circumstances in one's life as well as physical and emotional bonds such as property ownership, family etc. that tend to keep one tied to a place.

3.3 Elements of Urban Identity

Based on the sections above, in this section five elements of urban identity are discussed which are further analysed empirically using the case study in subsequent chapters. These elements are derived from the attributes, layers and dimensions of urban identity.

3.3.1 Built Form and Design

Built form and design are the most tangible parts of the identity of a given space. These are the major focus areas of researchers related to the identity of space. Aesthetics and urban design, as well as their impact on creating the 'image' of a place have been thoroughly researched. "The notion of place from the built form and design perspective stands for "totality made up of concrete things having material substance, shape, texture, and colour"" (Norberg-Schulz, 2007). The built form and design aspects of the three case study areas are briefly discussed on the basis of reconnaissance survey and data provided by the Stadt Essen in chapter 5.

This research is however focused mainly on other four elements of the urban identity. The decision not to discuss the built form and design in depth is based upon three factors; first, it is a very vast field in itself and commands much more resources than this research can permit; second, this field is relatively well researched compared to the other four elements, hence there

is a greater need to analyse other four elements from the urban planning perspective; and third, it pertains more to architecture and urban design fields which are neither the focus of this research nor a field of author's expertise.

3.3.2 Usage

The way in which space is used is very central to its identity and depends upon many factors. It forms the basis for the formation of personal experiences, relationships as well as memories. Everyday experiences that we have in a city, are to a great extent determined by the usages that are planned, permitted and happening in a given space. In this regard the role of land use planning becomes very important as it determines the predominant usage of the space, thereby controlling user's experience of that space significantly. The importance of usage in determining the identity of space has been highlighted by many researchers. Kevin Lynch lists the 'experience of user' and 'purpose' of user among the major factors providing the sense of space (Lynch, 1981).

3.3.2.1 Land use

The usage of space depends upon many factors. The two main factors are, the permitted land use and the prevailing socio-economic condition of the users. Land use in turn is influenced by two main components, i.e. permitted land use and land value. In neo-liberal cities, usage is determined by the market which controls who can afford to own the land or have access to it. This combination of land use and land value plays a crucial role in determining the usage of space. This significance is highlighted from the classical Thünen's¹¹ value- land use map to today's prevalent land use transport models. The importance of transport is discussed further under the subsection 3.3.3. (Association).

3.3.2.2 Socio-economic factors

Social and economic factors of the residents of a particular location are related to various social and economic variables of the population, including age group distribution, education, employment and income profile. These factors determine the ability and access of a person to various resources as well as his/her tendency to use them. Lifestyle for example can influence how the usage of same space could be different from one family to another. "Lifestyle factors may influence downtown images and the role of stranger" (Reitzes, 1986). Reitzes's research found that "married couples and homeowners tend to experience downtown differently than unmarried people, couples without children and non-homeowners". The experience of the same place may

¹¹ Johann Heinrich von Thünen's classic 19th century land use model shows how the usage of land is influenced by the market process

also vary due to the user's economic conditions (Reeves & Halikias, 2016). These experiences may vary due to the lack of access to a certain resource or due to the ability to have access to alternatives. Similarly, factors related to health and ability to have access to public space, can either assist or hinder certain usages of space or promote certain specific kinds of usage (WHO, 2016, p. 25). Education as well plays a very significant role in how people perceive space and how they use it (Greene, 1982). It changes our priorities as well and in turn, can influence the usage. These factors are empirically analysed in the chapter 5.

3.3.3 Association

Kevin Lynch stated that “every citizen has had long association with some part of his city, and his image is soaked in memories and meanings” (Lynch, 1960). Association used here by Lynch defines how we feel about a place or city. Factors that influence association (in the context of space) significantly are relationships, everyday experiences and history. Interpersonal relationships with friends, families and the society form the axis of this association with space. It provides both a reason and the motivation to experience the space (Lynch, 1960). Everyday experiences are related to how we normally manoeuvre through the city on a daily basis. It is related to our experiences on the streets, with familiars as well acquaintances and many other whom one may not even notice; they together form the experience of city. These associations provide a sense of belongingness to people which can promote people to participate and care for the societies they live in. Lalli in (Lalli, 1992, p. 288) refers to research conducted in Germany by Winter and Church (1984) that found out “positive relationship between emotional ties to a location and political activities in that community”. It not only encourages participation but it (the sense of belonging) “is paramount in assisting someone to distinguish one place (or group as used in the social Identity theory by Tajfel) from other” (Tajfel H. , 1974). History is discussed separately in the subsequent section 3.3.4. Association can be measured and analysed using following variables.

3.3.3.1 Activities and avenues to associate

Activities and avenues that bring together acquaintances, unfamiliar or familiar persons, provide a common cause for them to form social bonds and foster the existing bonds and strengthen their association. In this regard, public spaces such as parks, plazas and market squares are of very high importance, as they often bring different people from same and different neighbourhoods/areas, which can create trust as well as foster the sense of belongingness in people (Larson, Jennings, & Cloutier, 2016). Similarly, public events such as a Christmas Market

or City's annual festival provide avenue for the social bonds to form and strengthen (Kuo, Sullivan, Coley, & Brunson, 1998).

3.3.3.2 Integration with rest of city

Identity is not only formed by where people live but also by how well they perceive and integrate with the rest of city. One of the main factors influencing this is the travel behaviour (Jacques & El-Geneidy, 2014). In this research, various factors related to travel behaviour are analysed, including the access to public transport, attitude toward it and car ownership.

The location of places of importance is a pull factor for people from across the city to travel (Lynch, 1960, p. 48). These places can be public library, government offices, natural attractions, employment hubs, markets etc. Places that function as the source of activities and this have a wider catchment than the immediate neighbourhood can generate the need for people to travel to different parts of the city. These factors are as well analysed in the case study areas.

The New Urban Agenda advocates to “promote...well-connected and well-located housing, with special attention to the proximity factor and the strengthening of the spatial relationship with the rest of the urban fabric and the surrounding functional areas” and “to strengthening social cohesion, intercultural dialogue and understanding, tolerance, mutual respect, gender equality, innovation, entrepreneurship, inclusion, identity and safety, and the dignity of all people, as well as to fostering liveability and a vibrant urban economy” (Nations, 2016, pp. 6,7,8). In the regard, the role of association in creating cities that NUA promotes becomes paramount.

3.3.4 History

History plays a very significant role in the formation of identity, be it personal or collective. It is the accumulation of everyday experiences and memories which anchors an individual's ties to a place. Tuan (Tuan, 1980) saw the identity of space as 'Rootedness' which he described as the “unreflective state of being in which the human personality merges with its milieu”. More importantly, Tuan claimed “rooted individuals are connected with and proud of their past”. Many researchers have highlighted the significance of place of birth and duration of stay at a place in forming the image of that place for a specific individual. Similarly, the history of the place itself influences how people perceive it (Lynch, 1960, p. 46). The events of the past influence how residents view the place today and how are they likely to perceive it in the future (perception is covered in the next section).

3.3.4.1 Origin, Nationality, historical linkages

This research analyses both the history of the space as well as the historical linkages that residents have developed over time with it. The first is done using the analysis of major historical events of the area after the second world war. The second one is covered mainly under the socio-economic analysis of the residents using variables such as nationality, duration of stay, place of birth etc. Place of birth plays a very significant role in strengthening the identity of space. People born at the same place where they live, are more likely to feel positive about the identity of that place than those who are not born there though the correlation diminishes as the period of stay increases (Lalli, 1992, p. 289). The historical character of the city (especially the city center) provides an anchor for people to relate to the past of the place, “the town center fulfils a function similar to that formerly provided by rural structures. In contrast to the recent suburbs, they (city centers) have grown historically, and are less anonymous socially and offer a richer variety of cultural and communal activities” (Lalli, 1992, p. 290).

In chapter 5, history has been analysed using the Eurobarometer surveys that cover the entire city of Essen and coverage of the case study areas in print media as the main sources.

3.3.5 Outlook

The outlook of a place pertains to how the residents perceive and envisage it to be doing at the present and in the future (Monica, 2015a, p. 14). It can be influenced by various factors, some of which are specific to an individual such as land or flat ownership, the presence of friends and family as well other factors that are applicable over the wider population such as the political and economic situation, the trust in public institutions, the level of employment, the investment coming to the region etc.

Outlook plays a major role in retaining the current and attracting new people to a certain place. It can be based entirely on the perception or could be formed over time through media, networking and daily life experiences. In this research, it is measured using two datasets primarily. First, it is the city-wide data set available from Eurobarometer where questions such as the level of trust in the government, willingness to continue living at the current location etc. are asked. This set of questions provides a substantial basis to analyse the perception of people living in the city of Essen. The second dataset is a survey that was carried out by the Institut für Stadtplanung und Stadtebau (ISS), Kulturwissenschaftliches Institut Essen (KWI) and Transportation Research & Consulting GmbH (TRC) in 2012 asking people about their mobility preferences primarily for a research called *‘Neue Verkehrskonzepte für die Stadt der Zukunft’* (New mobility concepts for the

city of future) but as well contains significant questions that can be used to render the collective outlook of the people from the three case study areas.

3.4 Conclusion

Cities can influence how one behaves, “the same person behaves differently as he or she moves from situation to situation and group to group. Indeed, groups and situations have their own behavioural attributes that regulate the behaviour of people in the situation or belonging to the group” (Hogg & Reid, 2006). This is seen as the influencing character of space which a person residing there inherits, “the person as a resident of a particular town acquires a number of quasi-psychological characteristics which are associated with that town (such as cosmopolitan, traditional, affluent, warm-hearted, industrious, cold, clean, poor, monotonous etc.)” (Lalli, 1992, p. 293). It is therefore possible to enhance the wellbeing or identity of a person by enhancing the identity of the space where he/she lives. This connection between urban identity and wellbeing forms the central hypothesis of this research. Many of the theories related to urban identity such as the those discussed in table 3-1 (by Kevin Lynch) connect highly to the theories of wellbeing such as Dahlgren Whitehead Rainbow Model (see section 2-2-3).

Identity is a very complex notion, made of several layers and factors. The subjective nature of identity makes any effort to quantify it even more challenging, however people residing in a specific area acquire certain traits of the area over time. These traits can be measured using direct or indirect parameters and a collective representation of them can enable us to understand the identity of that area. Many researchers have tried to understand urban identity from different perspectives and a comparative analysis of their work highlights certain parameters that are common across these perspectives. These common parameters are termed as the elements of urban identity (as discussed in section 3-3) and are further analysed in chapter 5. Urban identity being an attribute of urban wellbeing consists of elements that also impact the wellbeing. The interconnectedness of these elements is highlighted in next chapter 4 where four global best practices relating to urban identity and wellbeing are discussed.

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Chapter 4 Global Best Practices

This chapter discusses four examples from different parts of the world where projects directly related to wellbeing and urban identity have been employed as the a tool to bring about the desired changes. These examples are at different scales and have different objectives ranging from the policy level to the project level; this highlights the possibilities of application of the learning from these projects across levels, from national to the community level. The first example discussed is on the national level; the Canadian Index of Wellbeing (CIW) is a leading example of how policies on the national level can be adopted to internalize wellbeing as the main driving force behind all public endeavours. The second example is taken from the city of Santa Monica, California, USA which has become a wellbeing pioneer by preparing a comprehensive city wellbeing report that puts wellbeing at the centre of its vision and planning. The two examples of interventions on the community level are from Rio de Janeiro, Brazil and Medellin, Colombia. Bhutan is considered as one of the pioneering nations in the alternative measurement of growth (Gross National Happiness), this has been thoroughly discussed in section 2-8 in Chapter 2. The objective of this Chapter is to understand how wellbeing and urban identity are understood and practised at different levels and in different contexts.

This chapter is aimed at highlighting the application of the theories of wellbeing and urban identity through real success stories which combines the theoretical framework of the first three chapters together. There often exists a gap between the theoretical and applied side of any research, and this chapter is aimed at bridging that gap (from the point of view of this research). The examples discussed in this chapter also show the emerging trends in urban planning where the participative bottom up actions are gradually elevating urban planning along the wellbeing ladder (as discussed in figure 2-6). They also show how the apparently complex elements of urban identity can be addressed and how addressing, one element can create a ripple effect and eventually enhance the sense of wellbeing of the entire area.

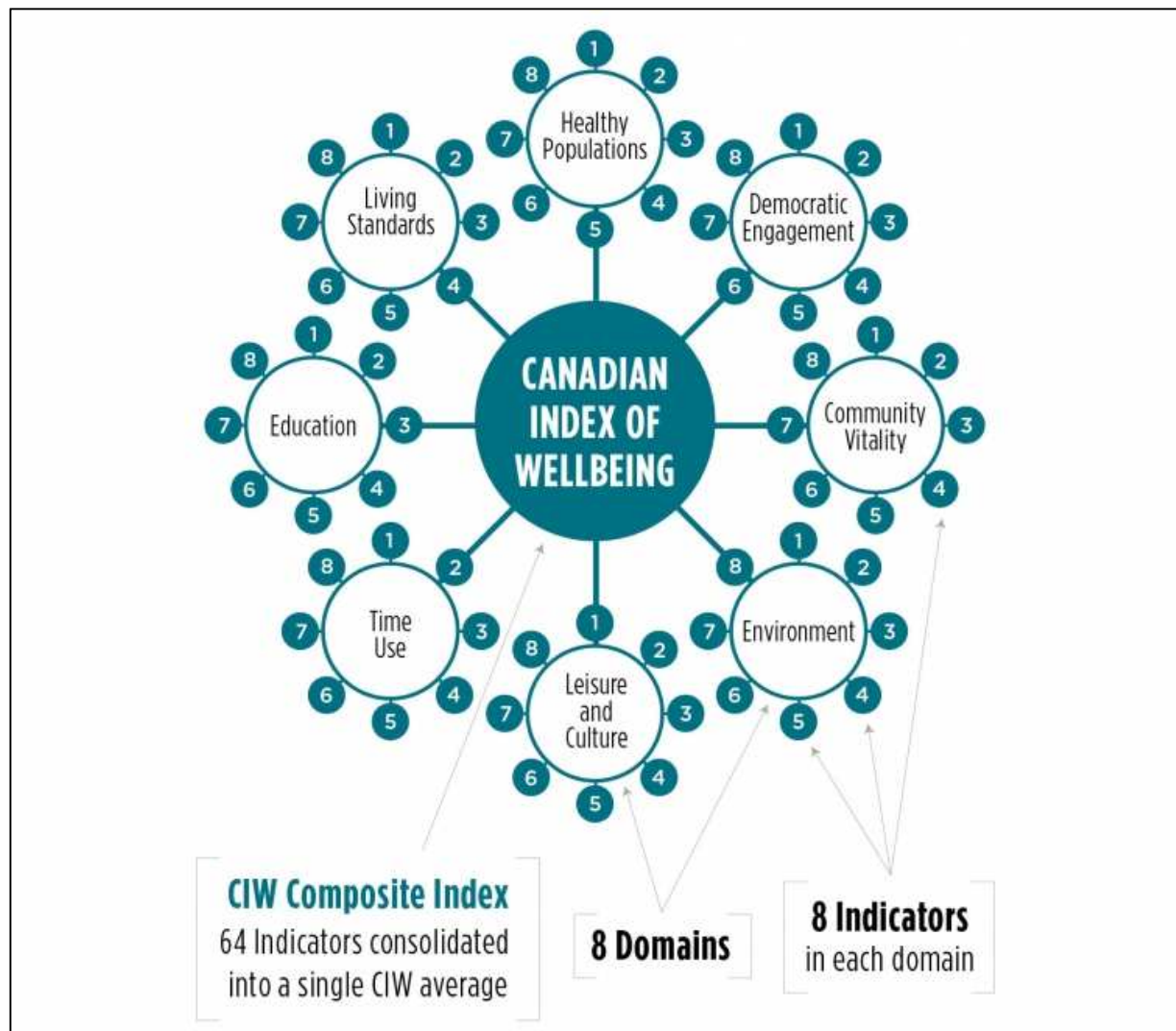
4.1 Canadian index of wellbeing

Canada has been a pioneer in urban development and is home to some of the best cities to live in the world, in terms of quality of life ranking (Brinded, 2016). The Canadian Index of Wellbeing (CIW) has jointly been developed by leading academicians, activists and the civil society as a complementary measure to GDP that can provide a holistic direction to the entire country. It aims to address the widening gap between economic growth and wellbeing that is resultant of

obsession with economic growth. It is distinct from other indices in the sense that it is a citizen driven initiative unlike many others which are promoted directly by the government. It aims to reflect the core Canadian values and measure them to understand how Canadians are ‘actually’ doing in life and what their sense of ‘wellbeing’ is. Its objective is to understand “the interconnectedness of many aspects of wellbeing, and using it to fuel evidence-based and community-focused decision-making” (Wellbeing, 2017).

In 2011, the first CIW annual report has been published. It has been derived from more than 200 secondary data sources which were categorized under 64 indicators, which were further clubbed under 8 domains (figure 4-1). The base year for all the data is 1994 and as the data have been collected from different sources with different bases, they were first changed to a base of 100 to

Figure 4-1: The Canadian Index of Wellbeing Conceptual Framework



Source: - Canadian Index of Wellbeing website <https://uwaterloo.ca/canadian-index-wellbeing/>

allow comparative analysis. All the factors are equally weighted. The 2016 CIW annual report informs that, while the Canadian economy grew by 38% per person between 1994 and 2014, wellbeing as measured by CIW grew by mere 9.9% during the same period (Wellbeing, 2016). Written in a very pleasant and easy to understand language, the report states things in a simple yet concrete manner, for example:

“When Canadians go to the bed at night, they are not worried about GDP. They are worried about stringing together enough hours of part-time jobs, rising tuitions fee, and affordable housing. They are thinking about the last time they got together with friends or the next time they can take a vacation. May be that’s why they are getting less sleep in than 21 years ago” (Wellbeing, 2016).

Table 4-1 explains all eight domains of the 2016 annual report along with the key findings for these domains.

Table 4-1: Canadian Index of Wellbeing, 2016

Domain	Description/indicators	Key findings
Community Vitality	communities that have strong, active and inclusive relationships among people, private and public and non-governmental organisations	<ul style="list-style-type: none"> • Two thirds of Canadians have a strong sense of belonging to their community • Canadians feel safer • Experiences related to discrimination is decreasing • People often help each other • Participation in formal volunteering is decreasing
Democratic Engagement	being involved in advancing democracy through political institutions, organizations and activities	<ul style="list-style-type: none"> • People are participating more in the democratic franchise • The confidence in the parliament and democracy in general has eroded • Women are under-represented
Education	systematic instruction, schooling or training given to the young in preparation	<ul style="list-style-type: none"> • Student teacher ratio is improving and there is an increasing investment trend in elementary education

	for the work of life and in adulthood	<ul style="list-style-type: none"> • High school and university education participation is increasing • Tuition fees have more than trebled
Environment	prevention of waste and damage while revitalizing our ecosystems and working towards the sustainability of all our resources in addition to others	<ul style="list-style-type: none"> • Canada has world's 4th largest per capita ecological footprint • Country is far from meeting its emission targets • Total farmland has shrunk by 7% between 1994 – 2014 • Fresh water reserves are vulnerable to climate change • Smog levels have not improved
Healthy Populations	physical, mental and social wellbeing of population including life expectancy, lifestyle and behaviours,	<ul style="list-style-type: none"> • Canadians are living longer but a not feeling healthier • Diabetes is affecting more and more Canadians • Mental health is improving while teen smoking is declining • Effective healthy life style awareness is urgently needed
Leisure and Culture	participating in leisure and cultural activities, arts, culture or recreation	<ul style="list-style-type: none"> • Canadians are spending less time socializing and lesser money on these activities • Less than 4% of Canadians have time to participate in arts and culture activities • Social leisure time fell is most pronounced in women • Volunteering is down by more than 30% • Night away recreational activities are down by more than a third

		<ul style="list-style-type: none"> • People are getting more interested in national parks and historic sites and are engaging more in health-related exercises
Living Standards	Canadians average and median income and wealth, distribution of income and wealth including poverty rates, income fluctuations and volatilities, economic security, including labour market, housing and food security	<ul style="list-style-type: none"> • Family income has been increasing • Fewer Canadians are living in poverty • Income inequality has increasing • Access to affordable housing is fast decreasing • Food insecurity is on rise • Long term unemployment is rising and the employment quality is deteriorating
Time Use	how people experience and spend their time	<ul style="list-style-type: none"> • Fewer Canadians are working more than 50 hours weekly • Flexible work hours are widely available • Fewer workers have regular daytime hours • Low income households are worst impacted • Women are more likely to be underemployed • Time pressure is increasing • Canadians are sleeping lesser – two third are sleep deprived • Average commutation time is more than an hour daily • Time to spend with friends is down by 30%
Source: Canadian Index of Wellbeing Report, 2016 (Wellbeing, 2016)		

The research work of CIW is divided into two streams, first the national and provincial index reports, and second, the community level wellbeing survey reports. It is an innovative index that disseminates its findings to ensure a greater participation of the public and provides clear policy formulation and implementation guidelines. “The CIW framework encourages people to question

the way decisions are currently made, and to consider alternative ways to promote a higher quality of life for all Canadians as well as a healthy economy” (Wellbeing, 2017).

CIW has come up with a list of highly ambitious, bold and innovative policy proposals that include the recommendation to provide a universal basic income to all the citizens to reduce the income inequality, adopting a pan-Canadian education policy, leveraging community resources through collaboration, providing a universal access to leisure and culture and improving the social and environmental data collection for better policy formulation. These recommendations are aimed at creating and fostering a wholesome environment that promotes wellbeing of all Canadians.

CIW is an implementable derivative of the theory of wellbeing discussed in Chapter 1. It focuses on what is more meaningful for Canadians than what is important for the Canadian economy. By shifting this focus, it aims to shift the focus of policies on human wellbeing. The eight domains of CIW relate highly with the attributes of wellbeing discussed in Chapter 2 as well the elements of urban identity discussed in Chapter 3. Community vitality and democratic engagement domains relate directly to the participation and engagement attribute of wellbeing as well as the association and history elements of urban identity. In the analysis of the CSAs in Chapter 5, factors highlighted by the CIW such as active participation in democracy (voting) are analysed. Education, healthy populations, environment and living standards domains of CIW relate to the safety and access attributes of wellbeing as well as the usage element of urban identity. Leisure and culture and time use domains relate to the identity attribute of wellbeing and within that they relate to the elements of usage, association, history and outlook. All these are empirically analysed for the CSAs.

4.2 Santa Monica, California, USA

Santa Monica is a city west of downtown Los Angeles, USA and has a population of 89,736 (2010, US Census Bureau). Located on the Pacific coast, it is a famous upper class residential city. It has long been a leading municipality on the environment front and a leader in the field of sustainable city development. At the first glance, Santa Monica looks like an ideal, prosperous, progressive and peaceful community but the city wanted to look deeper into itself and redefine what progress means. The wellbeing project aims to “define, measure and actively improve wellbeing” in Santa Monica (Monica, 2017). The objective was to measure both subjectively and objectively if all residents ‘indeed’ enjoy the high quality of life that Santa Monica is famous for (Marshall, 2015). It also aims to establish a partnership between government, private sector and the civil society.

It aims to bridge the gap between the scientific knowledge and policy formulation by using the data driven urban planning based on the principles of the wellbeing and through coordination around a common wellbeing agenda using the local resources. The main objectives of this project are as follows (Monica, 2015a):

- (a) To develop a set of wellbeing indicators
- (b) To use an expert panel and the community end user to review dimensions
- (c) To develop a data analytical framework for use and translation of wellbeing information
- (d) To work with the city government and the non-governmental institutions to interpret the information
- (e) Dissemination of the results to other cities

The “Local Wellbeing Index” as defined and adopted for this project measures wellbeing as a sum of the six broad categories, Outlook, Community, Place, Learning, Health and Opportunity. The key findings report of April, 2015 defines these categories as follows (Monica, 2015a):

Outlook: It refers to the concepts of eudaimonic or subjective wellbeing – in short, how do people feel about themselves and their lives

Community: Often described as “social capital,” a community with strong connections among its inhabitants can flourish in good times and withstand the tough ones

Place: The characteristics of the area in which people live—physical, social, environmental and economic—affect how wellbeing is fostered and supported

Learning: Education is linked to virtually all wellbeing outcomes, but even beyond measures of high school or college graduations, lifelong learning in and out of the classroom is a key factor of wellbeing

Health: Being and feeling healthy—or at least having the tools and resources needed to manage any health challenges—are essential to an overall sense of wellbeing

Economic Opportunity: Economic conditions, including opportunities for upward

This project has been supported by US\$ 1 million fund from the Bloomberg Philanthropy’s mayor’s challenge and executed by the City of Santa Monica in collaboration with the Rand Cooperation, USA and the New Economics Foundation, UK. For this purpose, more than 2200 interviews were conducted alongside the data collected from various secondary sources and the social media.

The tapping of non-traditional data sources such as the private sector and individuals (through survey) allowed the findings to be more representative and empirical. The report states that “cities must leverage all of the data they routinely collect about residents, services, and programs. Local government has an important role to play in promoting the existence of conditions to support individuals’ desires to improve their personal wellbeing - which in turn enhances community wellbeing.” (Monica, 2015b).

This report defines wellbeing as “the extent to which people experience happiness and satisfaction, and are realizing their full potential”. It further states that “when a person is happy, believes his/her life is going well, and is functioning positively (in terms of positive relationships, autonomy, competence, among other factors), he/she can be considered to have high levels of individual wellbeing. Key aspects of community wellbeing include community health, economic resilience, educational capacity, and environmental adaptation. In order to capture both individual and community wellbeing, subjective (e.g., perceptions of individuals and the community) and objective (e.g., availability of resources) data should be included” (Monica, 2015b). This definition of wellbeing is very similar to the various definitions of wellbeing discussed in Chapter 2. The outlook and place categories of this report relate to the usage, history and outlook elements of urban identity discussed in chapter III. Data collected for this exercise was a very useful guideline for this research to follow and many of the factors for which data was collected in the Santa Monica Wellbeing Project, are empirically analysed in Chapter 5. The Santa Monica Wellbeing Project further states that “making wellbeing a goal of policy-making is a new and promising approach at the local and national levels” (Monica, 2015a). It also provided a guideline for the chapter 6 of this research that aims to provide a fundamental framework that can be used to formulate policies which address the wellbeing of people.

This report is theoretically built upon the previous works related to wellbeing and human development such as the work such as the National Account of Wellbeing by New Economic Foundations (Michaelson, Abdallah, Steuer, Thompson, & Marks, 2009); works of noble laureate Daniel Kahneman (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004) and the French Commission on the Measurement of Economic Performance and Societal Progress (Stiglitz, Sen, & Fitoussi, 2009). These formed the basis for the empirical analysis of Santa Monica, thus resulting in policies that are further translated as implementable projects. The vast amount of data collected from various primary and secondary sources was spatially categorized as per the zip codes (*PLZ*). Similarly, in this research, data has been collected and analysed at the neighbourhood (*Stadtteile*) level to ensure an in-depth comparative analysis.

The results from this project indicated that Santa Monica is doing relatively better than the rest of Los Angeles county and USA. However, certain areas of improvements were found which can enhance the wellbeing across the city. The key findings from the report based on the detailed report published in April, 2015 are listed as follows:

- (a) Many in the community lack the sense of social cohesion
- (b) People are not as healthy as generally believed
- (c) Mobility and development projects can impact, enhance or diminish wellbeing
- (d) Younger residents are more likely to have lower levels of wellbeing
- (e) Residents with Latino background are more likely to have lower levels of wellbeing
- (f) There is a spatial correlation to the level of wellbeing as it changes as per the postal codes (PLZ)
- (g) Gender can affect the level of wellbeing as well, though not very significantly
- (h) Housing is the most common concern for the residents

This report presented some expected as well as unexpected results. Santa Monica is a very heterogeneous and prosperous community as reflected by the results. The lessons learnt from Santa Monica can be useful for the city of Essen, especially the usage of data in understanding the community level needs. Both cities are home to people coming from various cultures and nations. The proposal to address different area specific needs simultaneously to enhance the overall level of wellbeing, highlights the need for the adaptation of a grass root level and data driven collaborative participatory planning. In addition to addressing the areas of concerns, the city of Santa Monica aims to widely disseminate and discuss the findings of this report among its citizens and other cities across the world to assist them in understanding urban wellbeing better and improving its empirical measurement.

The case study of Santa Monica provided a strong justification as well as very relevant theoretical frameworks for this research. The conceptual background to wellbeing and its definition used in Santa Monica provided the understanding of wellbeing from an urban context. It also helped in understanding its measurement, the data needed to do so, its analysis and interpretation. The learning from this case study is reflected in Chapter 2, 5 and 6.

4.3 Medellín, Colombia

Medellin is the second largest city in Colombia, and the Medellín metropolitan region has a population of 3.72 million (Medellín, 2006). The story of change of Medellín, from one of the most dangerous cities in the world to a global tourist attraction within a decade, is indeed the story of urban legends (Flint, 2015). This is a leading example of how small urban interventions at the community level can have multiplier effect across the society and can tremendously enhance the overall wellbeing of residents. Medellín which once has been the home of one of the world most infamous drug-lords Pablo Escobar, underwent a series of small yet vital structural changes from 2003 onwards which helped it to emerge from the shadow of drug trade and crime into one of the biggest tourist attractions in Colombia (Day, 2015). Driven by its innovative *urbanismo social* (social urbanisation) motto which was implemented through the *Proyectos Urbano Integral* or PUI (integral urban project), it went on to invest significantly in the poor and vulnerable neighbourhoods where people often lived on inaccessible hillsides. This was driven by the ideology of locating most beautiful buildings in the poorest neighbourhoods for them to work as the catalyst for change in those areas (Scruggs, 2014). The story of Medellín became the inspiration for cities across the world, and today Medellín is considered a pioneer in urban innovations. It was ranked as one of the fastest growing metropolitan areas in Latin America in 2014 (Parilla, Trujillo, Berube, & Ran, 2015).

This turnaround involved various small and large public infrastructure projects. Four most prominent and recognized projects include two projects related to public transport, one related to a public library and one related to public space and art. One of the most celebrated cases of the success of '*Urbanismo Social*' was the construction of the *Metrocable* (figure 4-2) which is a

cable car gondola service that connects the poor neighbourhoods located high up the hillsides directly to the metro line and the central business district, thus providing a fast, affordable and

Figure 4-2: *Metrocable*, Medellín



Source: Municipality of Medellín on Instagram, [Instagram/alcaldiademedellin](https://www.instagram.com/alcaldiademedellin/)

reliable public transport to millions who had hardly any access to public transport before. This also reduced the violence in the neighbourhood very significantly (Cerdá, et al., 2012).

Another successful intervention was the construction of a large modern public library *Biblioteca de España* (Spanish Library, figure 4-3) in one of the poorest and (former) dangerous neighbourhoods of Medellin, *Santo Domingo*. Connected by the *Metrocable* and financed by the government of Spain in cooperation with Colombia, this library park is famous for its architecture as well as for its symbolism. By establishing the library in what had been a no-go zone, it helped tremendously to redraw the image of the neighbourhood and provides a very positive outlook to the residents who took immense pride in it and ensured that the area continue to remain safe and welcoming (Holmes & Gutiérrez de Piñeres, 2014).

Figure 4-3: Biblioteca de España, Medellin



Source: - Wikipedia Commons accessed on 29.03.2017

https://upload.wikimedia.org/wikipedia/commons/0/0b/Plaza_Espa%C3%B1a_Medellin.JPG

One of the most interesting stories of change in Medellin is that of *Comuna 13*, a poor neighbourhood located on the hillside that had very limited access to rest of city and was plagued by violence. Its transformation is a perfect example of low cost innovation, community spirit and

creativity. To enhance the access, 384 meters of public escalators were constructed across the neighbourhood in 2011 connecting it from the top to bottom in six minutes (CNN, 2015). Overnight, the brightly coloured houses and street art murals of the neighbourhood became a local and tourist hotspot assisted by its enhanced accessibility and (in part) the fascination of using escalators as means of public transport. This eventually helped in improving the overall wellbeing of *comuna*, helped in reducing violence and encouraged the community to come together as well and take the ownership of its space and new infrastructure created by the city (Reimerink, 2014).

Figure 4-4: Plaza de Botero, Medellin



Source: - Google street view accessed on 29.03.2017

Medellin has been innovative with public art as well and has been a pioneer in taking art away from the exclusive galleries into the open public spaces. *Plaza de Botero* is a public square (figure 4-4) that houses 23 sculptures by the famous Colombian artist Fernando Botero. Many of these sculptures had been earlier housed in prestigious galleries across the world before but were donated by the artist to the city of Medellin which decided to house them in open space, this made them accessible to large sections of the society who earlier did had very limited access to art

galleries. By bringing the art closer to the public, it enhanced the pride and association that residents had with Medellín .

The turnaround of Medellín has been an inspiration for cities worldwide, and the city was recognized as the 2012 “innovative city of the year” by the Wall Street Journal and the Urban Land Institute, USA (Journal, 2012). From being one of the most dangerous cities in the world, Medellín turned around within a relatively short time to a vibrant metropolitan area and hosted the UN Habitat World Urban Forum in 2014. The innovation, low cost and simplicity of solutions implemented in Medellín present a paradigm change in urban regeneration of poor neighbourhoods, the key to success (of Medellín) is the partnership between public and the administration as well as the empowerment of the residents which makes them feel to be the owners of projects (Scruggs, 2014).

The story of the turnaround of Medellín is a glaring example of how well planned, participative and community driven urban interventions can improve the wellbeing of people by strengthening its identity. This case study validates the theories of urban identity and wellbeing discussed in this research and provides guidance on successful policy and project formulation, which is further discussed in chapter 6. The examples of *Metrocable* and escalators relate to the usage, association and outlook elements of urban identity as well as the access, identity, safety participation and engagement attributes of wellbeing. The locational as well as the aesthetic significance of the *Biblioteca de España* is a suitable example of using urban design and community planning to enhance the sense of belonging and association as well as safety in a rather negatively viewed neighbourhood, this is further used as a guideline for Chapter 6. *Plaza de Botero* example highlights the significance of enhancing the usage as well as the sense of association to existing urban infrastructure through small urban interventions. All these examples have inspired various chapters of this research including its methodology as well as the analysis of the CSAs.

4.4 Rio de Janeiro, Brazil

Rio de Janeiro is one of the largest and most vibrant cities in the world. With a population of more than 16 million (Estatística, 2016), it is a massive sea of people who come from across Brazil with lots of aspirations and dreams. Brazil remains one of the most unequal nations in terms of wealth distribution in the world with a Gini coefficient of 51.5 as of 2014 (Bank, 2016). The growing level of inequality is spatially manifested as *Favelas* or slums that dot the upper riches of this mountainous city. Rio de Janeiro has witnessed very high levels of crime and still has pockets of

high criminality, though things changed quickly in 2016 when the city hosted the Summer Olympics (Romero & Jacobs, 2015). Despite crime and conspicuous inequality, Rio is home to several successful urban interventions and has showed ways to other cities across the world in improving the quality of life in some of the least developed neighbourhoods at minimal costs.

The neighbourhoods of *Vila Cruzeiro* located in the north and *Santa Marta* located in central part of Rio de Janeiro, are classified as slums or favelas and house around 60,000 and 8,000 people respectively. Both these favelas host sties of some of the largest urban painting projects. The wave of change that started with these paintings has significantly improved the quality of life, especially the sense of pride and association with these neighbourhoods among their residents. These projects were started by two Dutch nationals, Jeroen Koolhaas and Dre Uhrhahn (known as Haas & Hahn) who along with local actors created a large urban canvas in one of the most neglected and dangerous areas of Rio de Janeiro.

Figure 4-5: Rio Cruzeiro, Rio de Janeiro



Source: www.favelapainting.com accessed on 29.03.2017

Their first project was a community driven art project (mural painting) that began in year 2006 in Vila Cruzeiro. With the support of locals and NGOs, they painted a large mural near the community playground with the image of a boy flying the kite. Motivated by the positive response and support they received from the local community, they painted over 2000 square meter of a drain cum landslide containment wall with the image of a fish swimming in blue water. It was called the *Rio Cruzeiro* (Cruzeiro River) (figure 4-5). Both these works were highly acclaimed and brought international recognition to these favelas (Darlington, 2010).

In 2010 they started another project in Rio, on a much larger scale. In the *Santa Marta* favela, they started painting 34 houses in a simple cohesive pattern at the *Praça Cantão* (Cantão Square) which is a central public place in the favela (figure 4-6). The simplicity of design ensured a higher participation of locals who after basic training in painting were employed for the project, this allowed a much larger area to be painted within one month (Darlington, 2010). This also empowered the local community to find cohesion among themselves and the project is still ongoing, now completely run by the community itself. Even through simply painting the façade, the much larger problems of racism, unemployment, crime, drug abuse and more that these favelas still face are not solved; it gives the community a positivity and pride, and some extra income through tourism that these painting has generated. Haas & Hahn acknowledge it (Williams, 2013):

“Obviously, a painting project is not going to solve that. Wages haven’t risen and the number of jobs hasn’t risen, but the attitude has risen, ever so slightly. People take a bit more pride and care in their street. It’s not just that it looks nicer, it’s also that they finally feel some attention has been given to their neighbourhood”

Their work has provided residents with pride and a new sense of life (Darlington, 2010). Their new-found identity holds the key to a better future and the hope that the positivity started by these paintings will eventually improve the living conditions in these favelas (Frayssinet, 2010).

The favela paintings are another example of the effective use of urban interventions to enhance the image as well as the sense of association and safety of an existing urban infrastructure at lower expenditure. The apparently mundane exercise of painting houses can be a powerful tool in community building. The patterns of painting overlapping buildings (and space in case of *Rio Cruzeiro*) and stretching between them, provide a visual link that connects the entire community socially and psychologically. The learnings from this case study helped in understanding the concept of urban identity from real life example and showed ways to successfully implement such

projects in a sustainable manner which are further used as guideline for policy recommendations in Chapter 6.

Figure 4-6: Praça Cantão, Rio de Janeiro



Source: www.favelapainting.com accessed on 29.03.2017

4.5 Conclusion

The four cases studied in this chapter are representative of the growing paradigm in planning where people and their wellbeing are at the centre of policies and actions and everything else including the financial considerations, are designed around it. This approach stems from the growing understanding and the debate around the notion of quality of life, happiness and wellbeing in cities. All these projects address a different level of planning; the CIW is aimed at complementing the national and regional policy making; Santa Monica wellbeing report is a data driven city level attempt to empirically understand the wellbeing of people; Medellin shows the way to how prioritize the budgetary spending when the resources are limited in a way that the urban interventions strengthen the identity and the association of residents, while the examples from Rio de Janeiro show how one rather mundane project can work as the catalyst of community change and can complement the intangible dimensions of wellbeing (and urban identity), especially the pride and association to the place where people live. These cases were carefully selected to cover various spatial levels as well as for being significant practical demonstration of the wellbeing and urban identity theories. They cover all four attributes of wellbeing discussed in chapter 2 as well as all five elements of urban identity discussed in chapter 3. The understanding of these cases not only assisted in understanding wellbeing and urban identity but also helped in revising the methodology and research questions of this research. CIW and Santa Monica Wellbeing Project provided a broad look into the data that is needed to understand and quantify

wellbeing and urban identity and further assisted in formulating recommendations for chapter 6 (based on the analysis of the CSAs in chapter 5).

It is argued earlier in this research that wellbeing in cities is multi-layered and multi-dimensional. Any approach that address one or more of these layers and dimensions has the potential to create a ripple effect. A comprehensive approach to wellbeing incorporates all these levels of planning, from the national level to the very neighbourhood level and works as combination of policy, programme, and projects, which respectively address their scale specific issues pertaining to wellbeing. The examples studied in this chapter, highlight the need and challenges in addressing the wellbeing in cities. Each example presents its unique solution which though is context specific, is based on by the fundamental theories of wellbeing and is promoted by its attributes such as participation, sustainability, decentralisation, rights to city etc. These cases indicate to a paradigm shift in urban planning as discipline where instead of suggesting a specific defined way to address wellbeing, different context specific approaches which can be addressed simultaneously to together enhance the comprehensive wellbeing of people, are suggested. This shows the advancement of urban planning as discipline which has evolved since the days of blue print planning to incremental planning to participative planning and is poised to incorporate the principles of wellbeing and *Eigenart* (identity) as shown in figure 2-6 (chapter 2).

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Chapter 5 Case Study – Introduction and Analysis

The selection of a suitable existing subject (in this research - residential neighbourhood) where the research hypothesis can be empirically tested and research questions can be answered, on the basis of the data collected is important and often the next step in a theoretical research. It provides a better understanding and visualisation of the theories and concepts behind the research and assists in identifying the challenges that are likely to arise during the implementation of theory as well as it highlights the shortcomings of these ideas. This chapter presents three neighbourhoods in Essen that are selected as the Case Study Areas (CSAs). The selection of these case study areas is based on the following parameters.

Table 5-1: Selection parameters for CSAs

Geographical location within the city of Essen
Functional nature
Different in character and well as history
Availability of requisite data
Physical Non-continuity
Source: - by author

As in many cities in the Ruhr area, there exists an invisible yet very functional north-south divide in the city of Essen as well, which is even physically symbolized by the *Autobahn* 40 (highway number 40) that dissects the city (Weiguny, 2013). The objective in selecting case study areas is to select at least one area

from each of the northern and southern parts of Essen. Considering the objectives of this research and the parameters from table 5-1, it is important to take the city centre (Stadt kern) as one of the case study areas due to its vital importance in defining the identity of city and its very central function w.r.t all other neighbourhoods. The functional nature of the probable CSAs (in table 5-1) means to select the city centre and two predominantly residential areas which are not SBD (secondary business districts, such as the Essen neighbourhoods of *Rüttenscheid* or *Steele*). The central business district as well as secondary business districts have some sort of functional and identity overlap, therefore in order to select distinct neighbourhoods which can provide a better comparison, only the CBD was selected while the SBDs were excluded. Physical non-continuity means that no two neighbourhoods which physically share boundary should be taken as many of the characters can overlap upon each other, thereby hindering the understanding of their similarity or dissimilarity. To allow an in-depth understanding and analysis, the number of case study areas is restricted to three. The data used in this chapter is collected from various sources including the city administration of Essen (Stadt Essen), its various agencies and organizations including its online statistical and geographic data base. Another important source of data is a study called the

“*Neue Verkehrskonzepte für die Stadt der Zukunft*” (or New mobility concepts for the city of future) conducted in March 2012 by the *Institut für Stadtplanung und Städtebau* (ISS), *Universität Duisburg-Essen*, *Kulturwissenschaftliches Institut*, Essen (KWI) and Transportation Research & Consulting GmbH (TRC) (Stiftung, 2013). It included 1015 representative telephone interviews which were carried out across Essen and covered a vast range of questions. Many of these questions relate directly to the various aspects being researched in this doctoral thesis. This study is referred in this report as the KWI Survey, 2012. The questionnaire used in this study is attached as annexure A-1.

Table 5-2: KWI Survey 2012

	Altendorf	Stadtkern	Heisingen	Essen
No of Samples	24	11	27	1015
% of Total Samples	2.36	1.08	2.66	100
Source: - KWI Survey, 2012				

As table 5-2 shows, the number of surveys conducted in the CSAs were 24 from Altendorf, 11 from Stadtkern and 27 from Heisingen which correspond to 2.36%, 1.08% and 2.66% of the total sample respectively. These numbers roughly correspond to the population percentage of these neighbourhoods (see table 5-3).

5.1 Introduction to the Case Study Areas (CSAs)

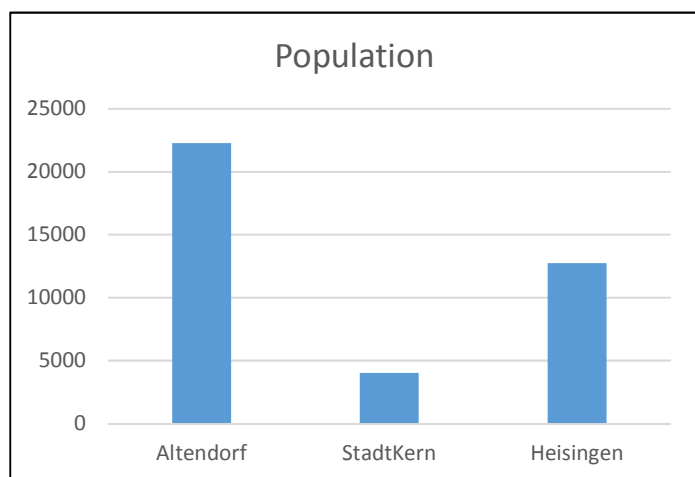
Based on the parameters discussed in the previous section, following three neighbourhoods (*Stadtteile*) were selected for further analysis out of the total 50 neighbourhoods in Essen,

1. Altendorf
2. Stadtkern (City Centre)
3. Heisingen

These neighbourhoods are briefly introduced in the section below while an in-depth sector wise analysis is done in the corresponding sections in this chapter. These sections provide

the introduction as well as analysis for various sectors. The rationale to categorize and analyse the data based on the sector to which it corresponds instead of analysing a specific

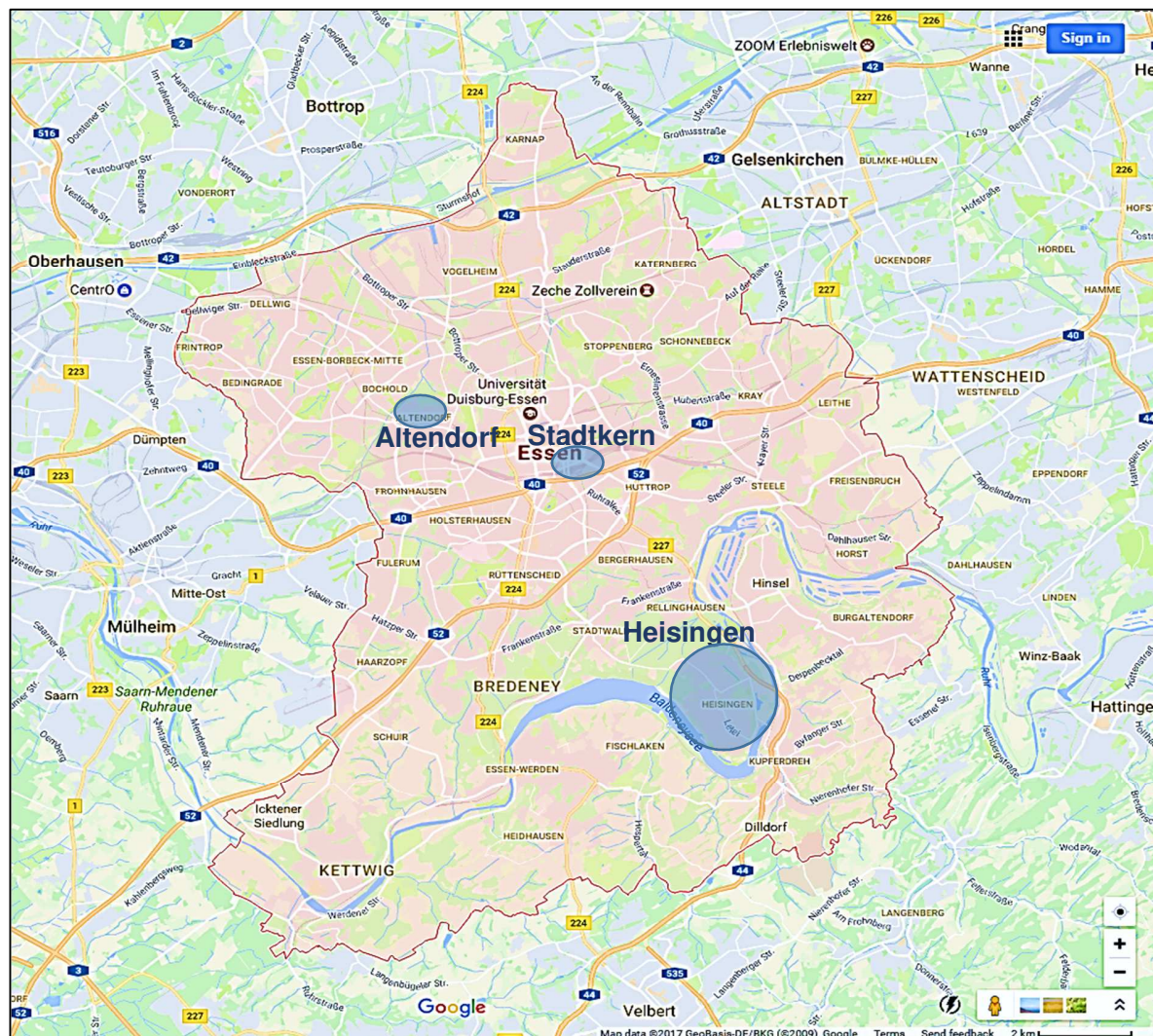
Figure 5-1: Population of CSAs



Source: - Stadt Essen, 31.12.2016

neighbourhood (analysis of a specific neighbourhood on all applicable sectors together in one section) is to follow the same parameters of urban identity (and wellbeing) that are defined in the previous chapters. Figure 5-1 shows the population of the three CSAs within Essen while figure 5-2 shows their location. The three CSAs have different population and significantly different population densities as well. This difference in population can influence how people from a particular neighbour view the city and how they are viewed by the rest of city (Schwab, 1992). Altendorf has more than five times the population of Stadtkern and more double the population of Heisingen. This has been considered in the process of data collection and analysis. Altendorf is located in the northern part of city, Stadtkern is located almost in the middle while Heisingen is located in the south-east of Essen.

Figure 5-2: The location of the Case Study Areas



Source: - www.maps.google.com accessed on 16 March, 2017

5.1.1 Altendorf

Altendorf (translating as Old Village in English) is located in the North-western part of the city of Essen. Altendorf is surrounded by the neighbourhoods of *Bochold* in north and west, *Nord-viertel* in north-east, *West-viertel* in east, *Fronhausen* in south and by *Schönebeck* in west. It is located in the proximity to city centre (approximately 3 kms) and the central train station (approximately 3.5 kms). It has a population of 22,279 (31.12.2016, Stadt Essen). Figure 5-3 shows the typical residential street view of Altendorf which shows low rise group housing blocks surrounded by the greenery and tidy streets.

Figure 5-3: Typical street view of Altendorf



Source: - www.maps.google.com accessed on 16 March, 2017

5.1.2 Stadtkern

Stadtkern (or City Centre) is located (almost) in the geographical centre of Essen, housing the Central Business District, the main shopping district as well as the central train station (Essen *Hauptbahnhof* or *Hbf*). It is surrounded by the neighbourhoods of *Nord-viertel* in north, *West-viertel* in west, *Süd-viertel* in south and *Ost-viertel* in east. It has a population of 4,014 (31.12.2016, Stadt Essen).

Figure 5-4: Typical street view of Stadtkern residential areas



Source: - www.maps.google.com accessed on 16 March, 2017

Figure 5-4 shows the typical residential street view of Stadtkern. Similar to Altendorf, it shows low rise group housing blocks however the street is slightly untidy and there is no greenery visible on this particular street.

5.1.3 Heisingen

Heisingen is an upper-middle class neighbourhood located in the southern part of Essen. Surrounded by the river Ruhr on the three sides its peninsular location provides it a geographical uniqueness. It is surrounded by the neighbourhoods of *Stadtwald* and *Rellinghausen* toward the north, *Überruhr-Holthausen* and *Byfang* in the east, *Kupferdreh* and *Fischlaken* in the south and *Bredeney* in the west. It is located approximately 6.5 kms away from the central train station. It has a population of 12,764 (31.12.2016, Stadt Essen). Figure 5-5 shows the typical residential street view of Heisingen where neat street with low rise individual houses and ample greenery can be seen which possibly indicates to higher socio-economic class of the residents.

In the following sections, all three neighbourhoods are examined under the different headings that are derived from the previous chapters (Chapter 2 and 3) of this research.

Figure 5-5: Typical street view of residential areas of Heisingen



Source: - www.maps.google.com accessed on 14 March, 2017

5.2 Socio-economic analysis

Table 5-3 summarizes the demographic characteristics of the three CSAs. Altendorf has the highest population, excessively high population density as well as the highest percentage of population of residents under 18 years of age. The relatively very high population density of Altendorf as compared to the rest of city could be attributed to the fact that the city authority owns substantial public housing there and in the neighbouring areas (such as *Frohnhausen*, *Holsterhausen*) which all exhibit higher than average population densities. A high population density belt runs along the central axis in Essen with all neighbourhoods lying around this belt (namely *Altendorf*, *Frohnhausen*, *Holsterhausen*, *Margarethenhöhe*, *Rüttenscheid*, *Südviertel*, *Südostviertel*, *Huttrop*, *Steele* and *Freisenbruch*) having higher than the average population densities of Essen as evident from table 5-3 and figure 5-6. Many of these areas housed the immigrants who came to work in various factories in the northern part of Essen. Over period of time, these areas grew denser with a distinct demographic profile than the south of Essen and some of these are now the preferred location of residents from low and middle income immigrants as they offer cheaper housing options than the other parts of Essen.

Table 5-3: Demographic Characteristics of the CSAs

	Altendorf	Stadtkern	Heisingen	Essen
Population	22,279	4,014	12,764	589,145
% Population	3.8	0.7	2.2	100
Population Density (/Ha)	165.7	90.5	60.3	73.6
Male Population %	51.1	54	46.7	48.3
Female Population %	48.9	46	53.3	51.7
Population under 18 %	18.7	13.8	14.8	15.7
Working age group % (18-65) out of total	66.4	73.5	56.6	62.9
Population over 65%	14.9	12.8	28.6	21.4
No of Households**	12,055	2,265	6,366	305,564
Avg. Household size**	1.8	1.6	2.0	1.9
Source: Stadt Essen 31.12.2016, ** 31.12.2015				

Heisingen has a slightly higher percentage of female residents than the male residents unlike other two CSAs where the male residents outnumber the female residents. This gap widens to 6% in Stadtkern where 54% of residents are male. Essen in general has a better gender balance with 3.4% more female residents than male. The distribution of the working age group population (age group between 18 and 65 years) shows a clear division between the neighbourhoods, with Heisingen having only 57% of the population in the working age group which is lower than the Essen average of almost 63%. The other two neighbourhoods have higher than the average working age group population percentages, with Stadtkern having almost three fourth of its population in this age group. The dissimilarity between CSAs gets more evident when comparing the under 18 and over 65 (years) population age groups. While Altendorf and Stadtkern have higher than average percentages of under 18 population, Heisingen has a higher than average (almost 30%) percentage of residents who are older than 65 years. This difference in the demographic profile should be seen in correlation with the origin and nationalities of the residents (figure 5-27, 5-28). The residents of the southern neighbourhoods of Essen are mostly white German nationals while the neighbourhoods in the north are more racially mixed with the higher percentage of dual nationals as well as foreigners (see table 5-8, figure 5-28). This might explain why there is a higher female population in Heisingen (as many traditional white German neighbourhoods are facing the shrinking population crisis with slightly higher female population

(Swiaczny, 2014)) while migrant dominated neighbourhoods tend to have younger and more male residents as evident in Altendorf and Stadtkern.

Figure 5-6: Population Density map of Essen, 2016

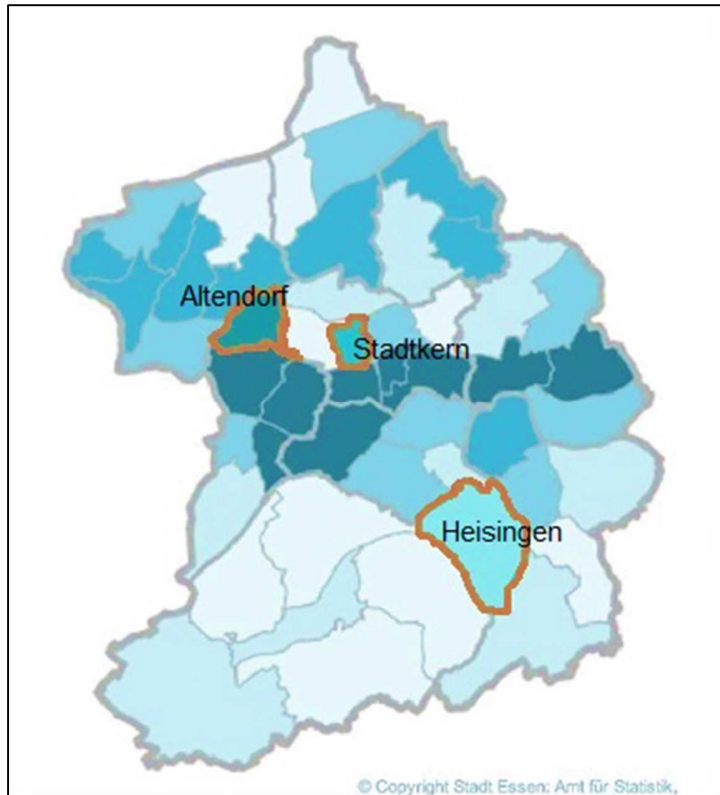


Figure 5-6 shows the population density distribution across Essen (people/ha). The three CSAs are highlighted. This figure clearly shows the high-density belt around the central areas in Essen with pockets of moderate density located in the northern part while southern neighbourhoods have predominantly lower population densities than the Essen average.

These patterns not only highlight the current dissimilarity; they also indicate the pattern that might continue in future if this trend prevails. In such a scenario, the northern neighbourhoods of Essen will have a higher population which

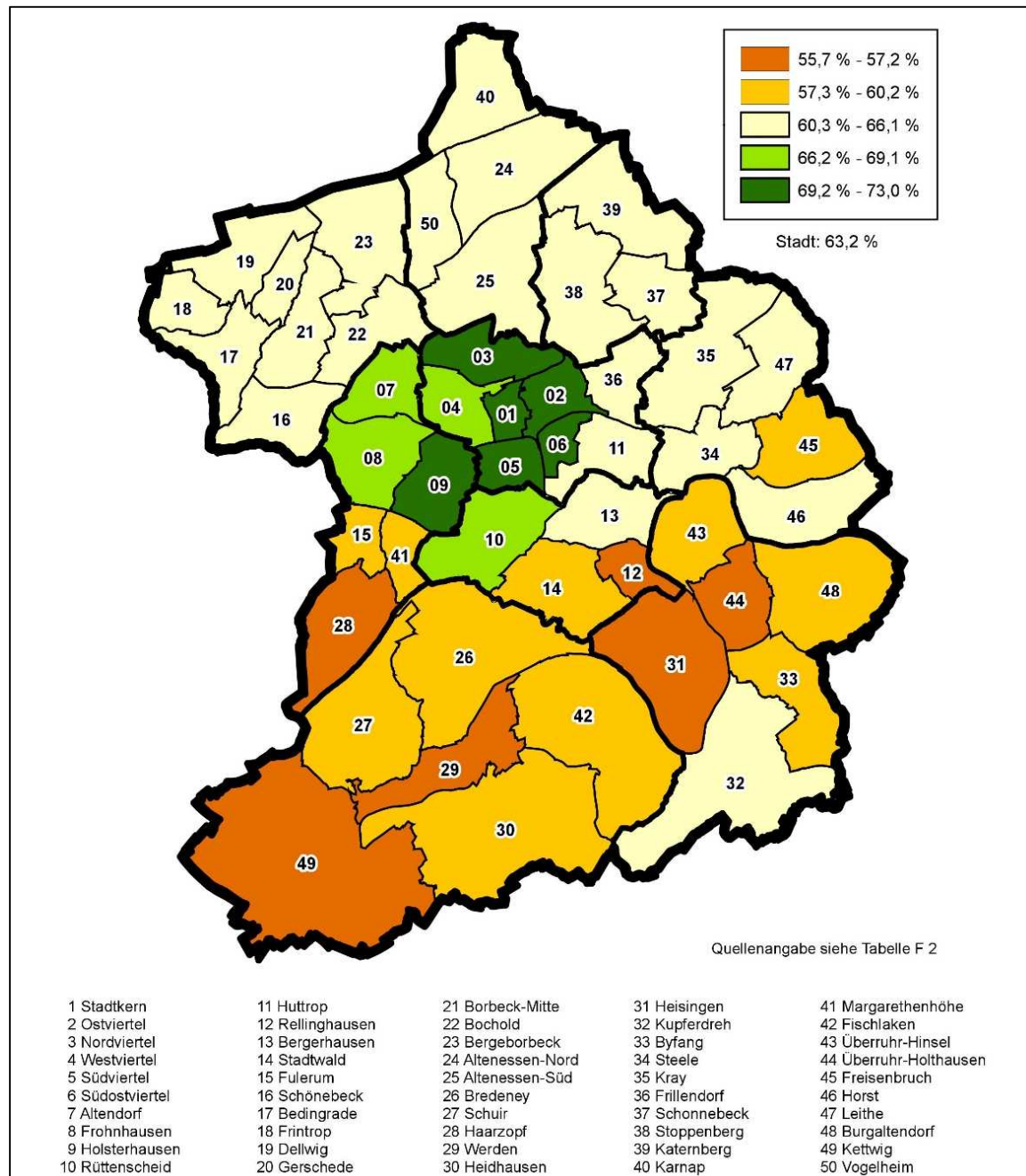
Source: - Stadt Essen online Population Atlas (person per hectare of the built-up space as on 31.12.2016)

will be younger (see figure 5-7) and live in denser areas than its southern counterparts.

In figure 5-7, the concentration of younger population in the northern part of Essen can be attributed to the significantly higher percentage of foreigners and dual nationals than the southern part of Essen. Northern parts of Essen have significant percentage of residents of Turkish and other immigrant origin who tend to have higher birth rate than white German residents (Mayer & Riphahn, 1999). The presence of foreigners can also bring the average age of residents down as they tend to be younger. Figure 5-8 shows the distribution of rooms per Dwelling Unit (DU) in the CSAs. It is evident that more than half of the DUs (54%) in Altendorf have 3 or less rooms which is higher than the average of such DUs for Essen (40%). This percentage jumps to close to two third in the case of Stadtkern while drops to 27% in Heisingen. Stadtkern has almost double the Essen average percentage of DUs that have up to two rooms only. More than 70% of DUs in Heisingen have four or more rooms which is higher than the average for Essen (around 60%).

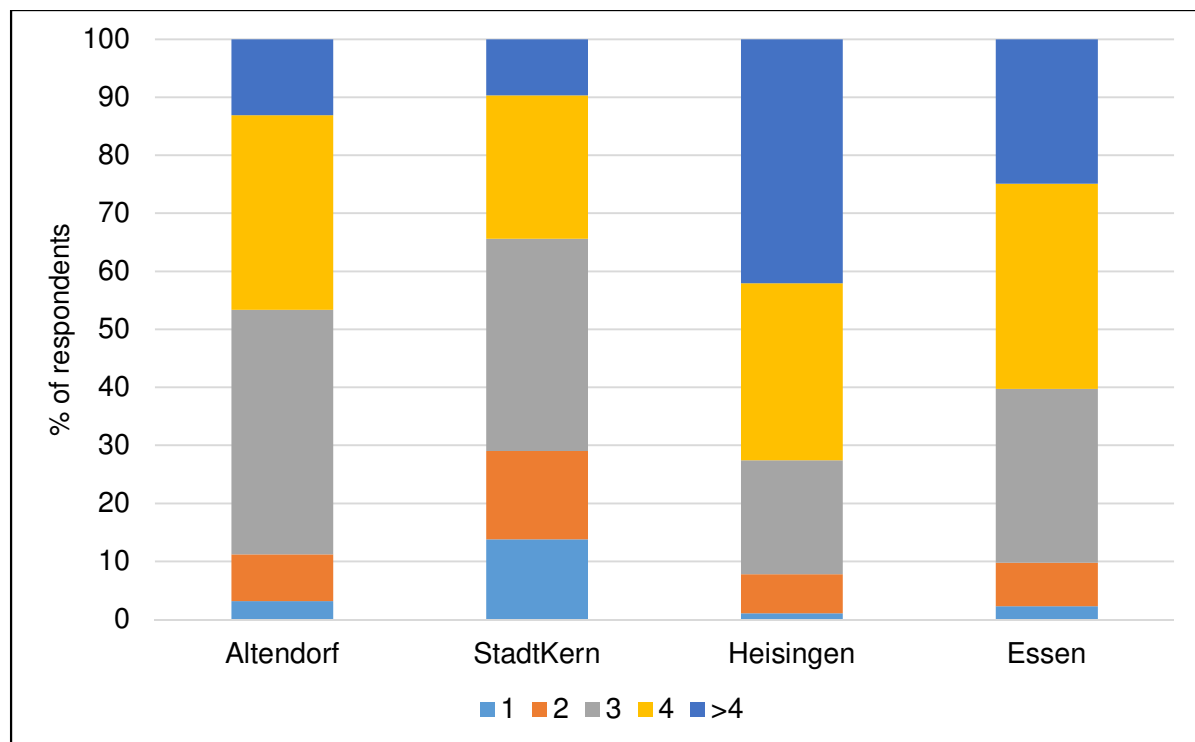
This could be due to lower income of the residents from Altendorf and Stadtkern (see figure 5-15) who can't afford larger houses while the residents from Heisingen with higher income can afford much bigger houses and dwelling units.

Figure 5-7: Population between age group 18 and 64



Source: - Stadt Essen, data as on 31.12.2015

Figure 5-8: Rooms per dwelling units



Source: based on data from Stadt Essen, 31.12.2015

Joining the findings from Figure 5-7 and Table 5-3, it can be argued that though both Altendorf and Stadtkern exhibit smaller household sizes (at 1.8 and 1.6 person per household respectively) than the Essen average (1.9), the dwelling units are smaller and located in much denser neighbourhoods. This situation reverses in the case of Heisingen which has a slightly higher household size of 2.0 person per household but offers much larger dwelling units. This can be attributed to the historic growth of these areas as well as their socio-economic and demographic profiles which witnessed the arrival of low income immigrants of different national and cultural backgrounds over time settling in the northern part of Essen while the relatively richer, upper middle class and the upper class of Essen (which is predominantly white and German), settled in the southern part of Essen (Heinen, et al., 1990). The lower household size of Altendorf and Stadtkern can be due to the higher presence of foreigners as well as students in these localities who often tend to either live alone or have smaller family size. The prevalence of low rise group housing blocks in the northern area results in a much higher population density than their southern counterparts which mostly have low rise individual family houses. This also indicates the possible continuation of the trends of spatial gentrification in Essen as due to their lower cost factor, these areas would continue attracting the lower income group people while the southern parts would

more attract the rich. This inherent spatial segregation can significantly influence the long term health and wellbeing of their residents as people from richer neighbourhoods are more likely to be healthier than those from the poor ones (Woolf, et al., 2015) .

5.3 Usage

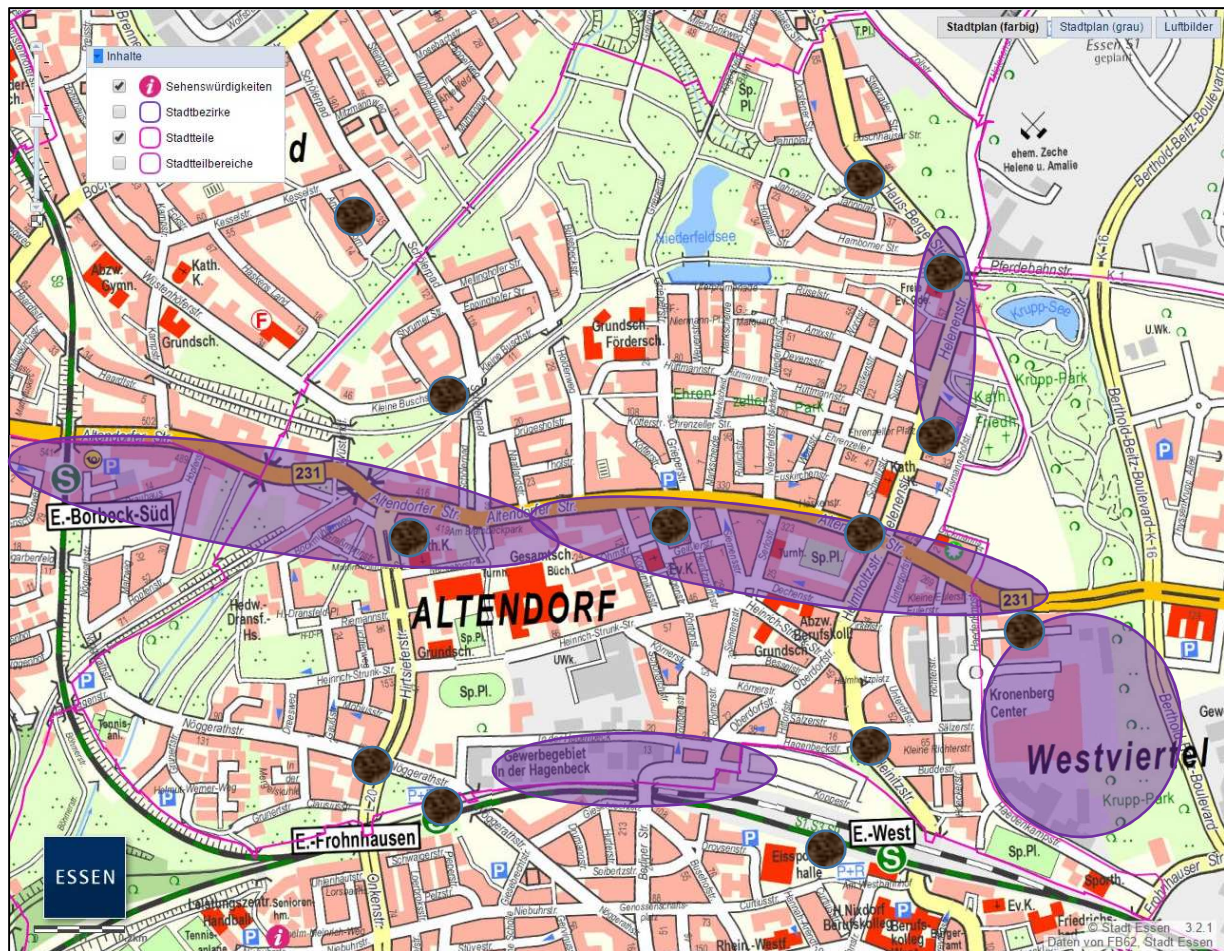
Altendorf is a predominately residential neighbourhood having mixed land use along the major arteries (Commercial and Residential). Stadtkern has a predominantly mixed land use with a higher percentage of commercial land use followed by the residential land use. Heisingen is an exclusive residential neighbourhood having an abundance of open and green spaces with very limited commercial and other usages. Figure 5-9 shows the major commercial (and mixed use) areas which are located along the major arteries in Altendorf as well as the location of public transport access points or stations.

Two main arteries passing through Altendorf, *Altendorferstraße* and *Helenenstraße* are predominantly mixed use areas with commercial shops dotting the either sides of these roads. The adjoining *Westviertel* has large commercial areas that cater to Altendorf as well. There are some specific commercial usages located along the southern periphery of Altendorf. *Altendorferstraße* is also the main public transport axis for the neighbourhood. There are two local train stations (*S-Bahn*hof) namely *Essen-Frohnhausen* and *Essen-West* located along the southern periphery of Altendorf. It has good access to public transport as across the neighbourhood public transport is within walking distance (see Annexure A-3).

The presence of mixed land use along the major arteries might mean lesser segregation of activities which in turn can provide enhanced avenues for association for the residents and is better for residents' wellbeing (Jacobs, 1961); this is supported by the findings of final analysis matrix (see table 5-17).

Figure 5-10 shows the major commercial areas as well as the public transport access points or stations in and around Stadtkern. As Stadtkern is the city centre which is home to the central business as well retail districts, the predominant land use is commercial followed by residential. Most of the commercial and retail usage are located along the *Ketwigerstraße* and south of the *Limbeckerstraße* that almost divides Stadtkern into two halves. One of the largest shopping malls in Germany (*Limbecker Platz*) is located at the western end of *Limbeckerstraße*.

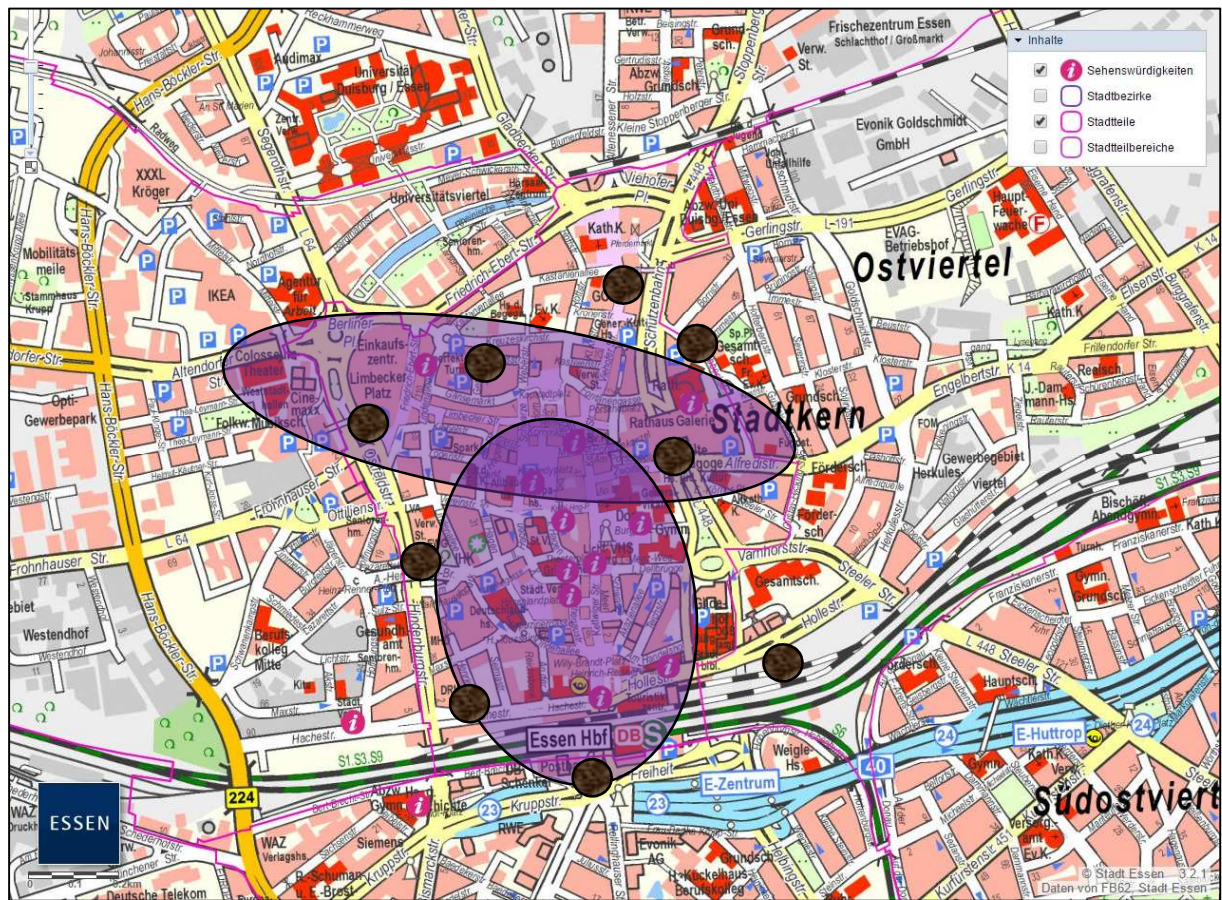
Figure 5-9: Major commercial areas and PT Stations in and around Altendorf



Source: Based on the online city plan of Essen, Stadt Essen; purple represents commercial areas; dark brown dots represent PT nodes

Stadtkern houses the main hub of public transport for Essen as the central train station is located here. There are three subway stations (U-Bahn) and three tram stations in addition to various bus stops across Stadtkern. These together provide Stadtkern with very high public transport connectivity and function as a major pull factor for the residents from others neighbourhoods as well. This impacts the identity of Stadtkern significantly. However, there are various other factors that might (eventually) offset these impact as evident from the table 5-17.

Figure 5-10: Major commercial areas and PT Stations in Stadtkern



Source: Based on the online city plan of Essen, Stadt Essen; purple represents commercial areas; dark brown dots represent PT nodes

Figure 5-11 shows the major commercial areas as well as the public transport access points or stations in and around Heisingen. The unique peninsular shape of Heisingen, surrounded by the river Ruhr from almost three sides has a very evident impact on the usage and the layout of this neighbourhood. It has evolved over time as a preferred upper middle class neighbourhood with high access to green space. *Heisingerstraße* is the main artery that connects Heisingen to the northern part of Essen and houses some commercial areas around the intersection with the *Bahnhofstraße*. Public transport access points to the busses running along the main arteries are located within walking distance across the whole neighbourhood (see Annexure A-3).

The urban evolution of Heisingen is highly influenced by its physiography and the culture of suburbanisation that started in the in first part of the 20th century. People tired of various problems of the inner city were lured by the lush greens and the serene surroundings of Heisingen. Its

peninsular shape and green buffer in the north, distinguish it from the rest of Essen, which overtime has developed (and preserved) its own subculture and identity similar to the other southern neighbourhoods of Essen such as Werden and Kettwig.

Figure 5-11: Major commercial areas and PT Stations in Heisingen



Source: Based on the online city plan of Essen, Stadt Essen; purple commercial; brown PT

5.3.1 Land Value and Living Space per Person

One of the main indicators of an individual's ability to use a space is the access that is gained through his/her affordability which can be indirectly measured through the land/floor value of that space and the income of people. The land values under consideration for this research are mainly from residential use and are quoted from the representative land parcel from each neighbourhood that is neither a prime land parcel nor a fringe. The values discussed are the sale value for one square meter of the floor area (*Bödenrichtwert*). The predominant floor values for the three CSAs are listed in the table 5-4.

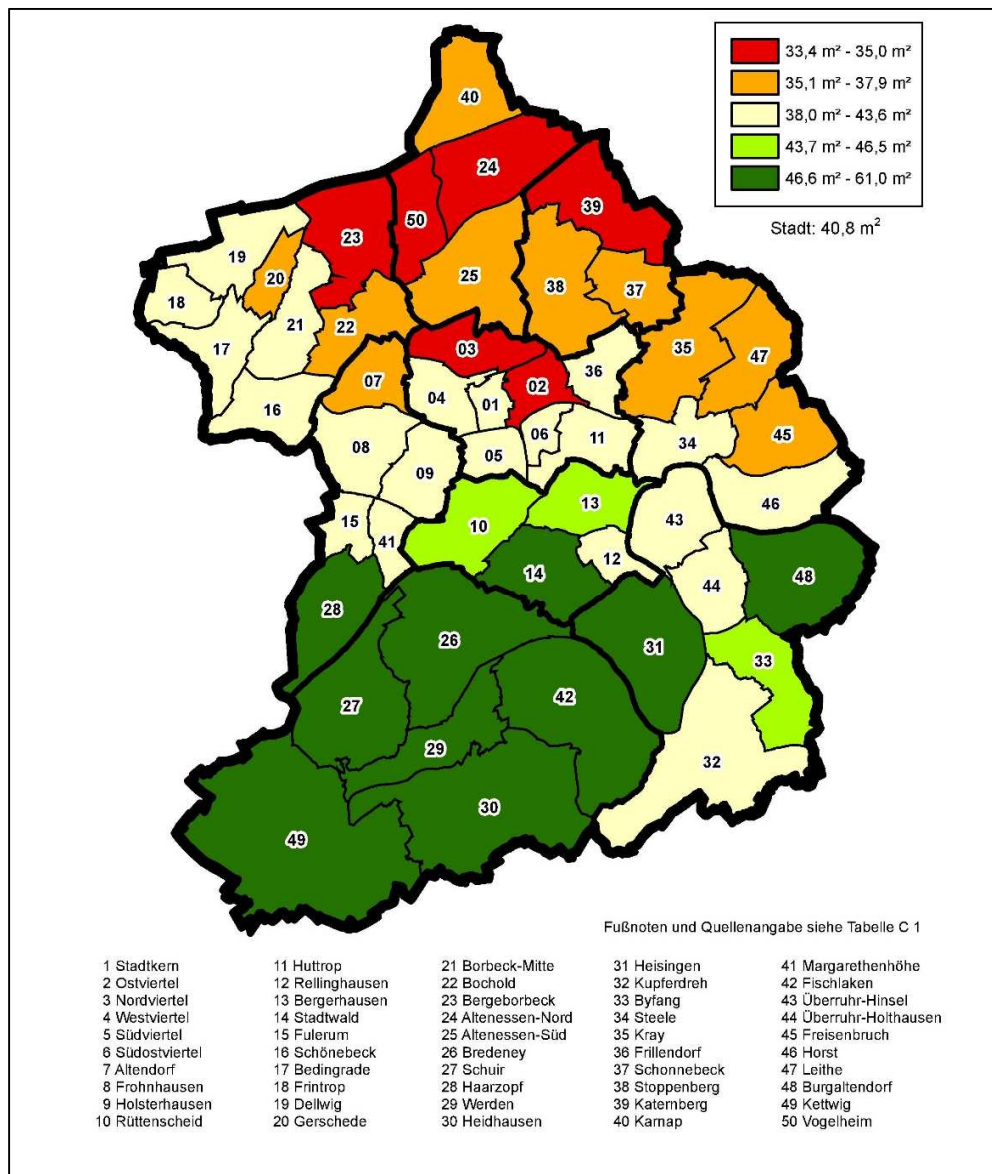
Table 5-4: Residential floor value in case study areas

	Altendorf	Stadtkern	Heisingen
Sale value in €/SqM	230-270 (Residential)	430 (Residential)-2500 (Commercial)	400-470 (Residential)
Source: BORIS NRW from NRW, Geobasis NRW (<i>Der Obere Gutachterausschuss für Grundstückswerte im Land Nordrhein-Westfalen</i>), 31.12.2016			

The values from Altendorf and Heisingen are for residential properties. As Stadtkern houses the main retail as well as the business district of Essen, both residential and commercial floor values are given in table 5-4. Altendorf has relatively cheaper residential space whereas Heisingen commands higher value for the same usage which are comparable or even higher than the similar usage in the city centre. Despite being far away from the city centre, there are several others factors including the higher demand and physiological characteristics of Heisingen that derive the residential floor values in Heisingen. This difference in land value fosters the gentrification as well as the north south demographic divide of Essen which can impact the sense of identity in all three CSAs. The high land value also affects other land uses in addition to the residential use.

Figure 5-12 shows the availability of living space per person (in square meter) across Essen as on 31.12.2014. There is a gradual increase in living space per person as one moves from the north to the south, and except few exceptions, most of the neighbourhoods in south, including Heisingen, offer more living space per person than the neighbourhoods in north. Altendorf provides relatively lesser living space per person than the Essen average, Stadtkern follows the Essen average while Heisingen provides almost 150% more living space per person than the average.

Figure 5-12: Living Space per person in Essen



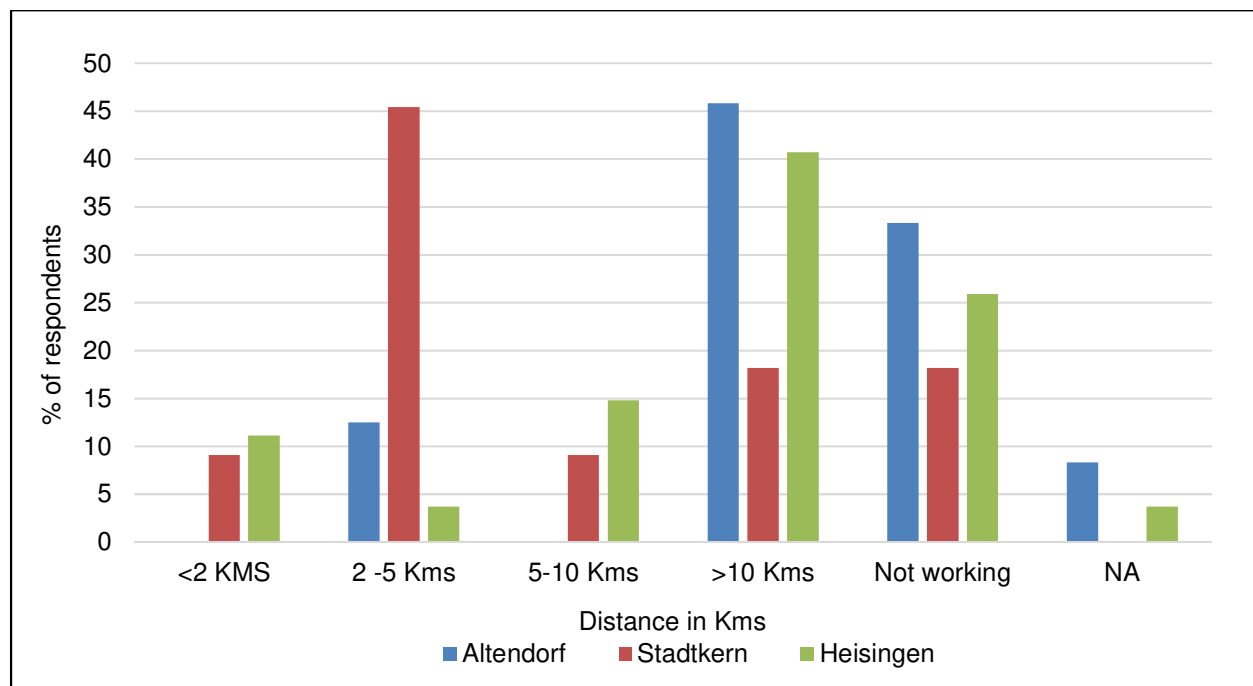
Source: - Stadt Essen, data as on 31.12.2014

Being located close to the city centre and former working class neighbourhoods in the north, housing in Altendorf and Stadtkern have developed over time to provide cheap accommodation to lower income group who can't afford bigger houses while Heisingen was the preferred choice of rich who wanted to get away from the cramped inner city. This difference in the ideology and need is reflected in the distinct living space per person provided by the CSAs.

5.3.2 Work-Home Relationship

Work-home relationship is one of the most important determinant of personal wellbeing. It is also ranked very high in the findings of BLI for Germany (see section 2.3.1). Based on the data from the KWI survey, 2012, the distance between the place of work and the place of residence for the residents from three CSAs is analysed in figure 5-13.

Figure 5-13: Distance to the place of work from Home



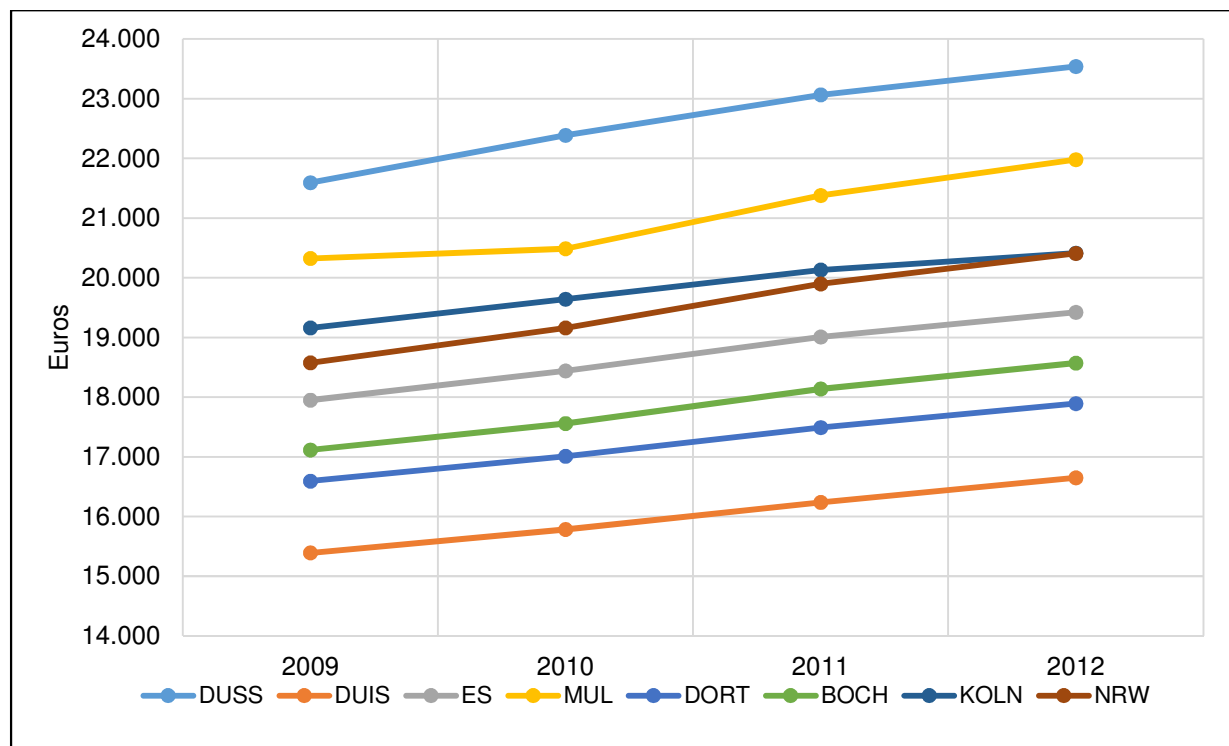
Source: - KWI Survey, 2012

Only in the case of Stadtkern, the place of work for majority of respondents is less than 5 kms away from their place of residence. However, there is a substantial percentage of respondents from all three CSAs who need to travel more than 10 kms from their residence to work. This affects how the residents of the three CSAs use their time for other activities as well as the level of stress they might endure due to the regular commute. As people need to travel over longer distances and spend more time commuting, they are more likely to have lesser time to form social relationships and in turn they endure more stress. This can affect their wellbeing significantly as people with longer commute have lowest satisfaction with life and can hinder the formation of stronger sense of belongingness to the areas where they live (Hilbrecht, Smale, & Mock, 2014).

5.3.3 Income and standard of living

A regular monthly income allows people to maintain a basic standard of living. Due to the lack of absolute monthly income data for the CSAs, this variable is measured using proxies including an understanding of per capita income of residents of Essen w.r.t. their counterparts in neighbouring cities in NRW.

Figure 5-14: Per capita income across NRW

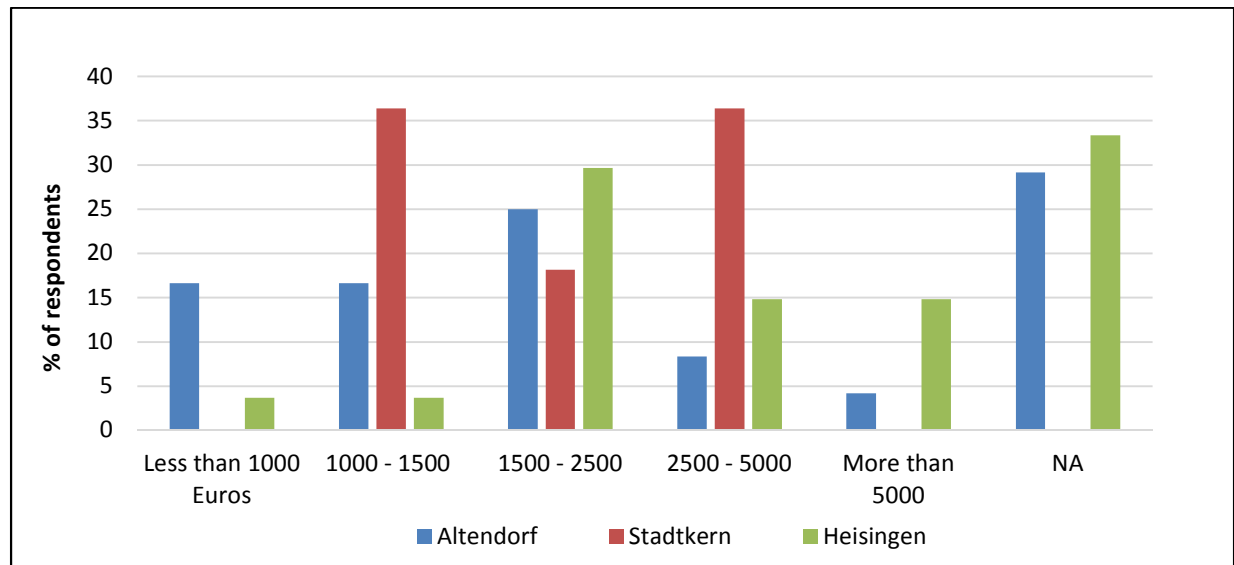


Source: www.mais.nrw.de (Ministerium für Arbeit, Integration und Soziales des Landes Nordrhein-Westfalen) (DUSS- Düsseldorf, DUIS- Duisburg, ES – Essen, MUL- Mülheim an der Ruhr, DORT – Dortmund, KOLN – Cologne, NRW – North Rhine Westphalia)

Figure 5-14 shows that the per capita income in Essen rose gradually between 2009 and 2012, a trend that is similar to other cities. Essen lies almost in the middle of the income range for cities but has a slightly lesser than average per capita income than the state of NRW. To further substantiate the findings of figure 5-14 and understand the income profile of the residents of the three CSAs, the response to a question regarding the monthly income of the respondents of the KWI survey in 2012 is analysed in figure 5-15. Most of the respondents in Altendorf reported to earn less than 2500 Euros per month with more than 15% reporting that they earn less than 1000 Euros a month. The respondents from Stadtkern are scattered across the middle-income brackets

(between 1000 and 5000 Euros per month and above) while those from Heisingen have a relatively higher concentration toward the upper range of monthly income (between 1500 and 5000 Euros per month) with close to 15% reporting a monthly income higher than 5000 Euros.

Figure 5-15: Monthly income - KWI survey findings

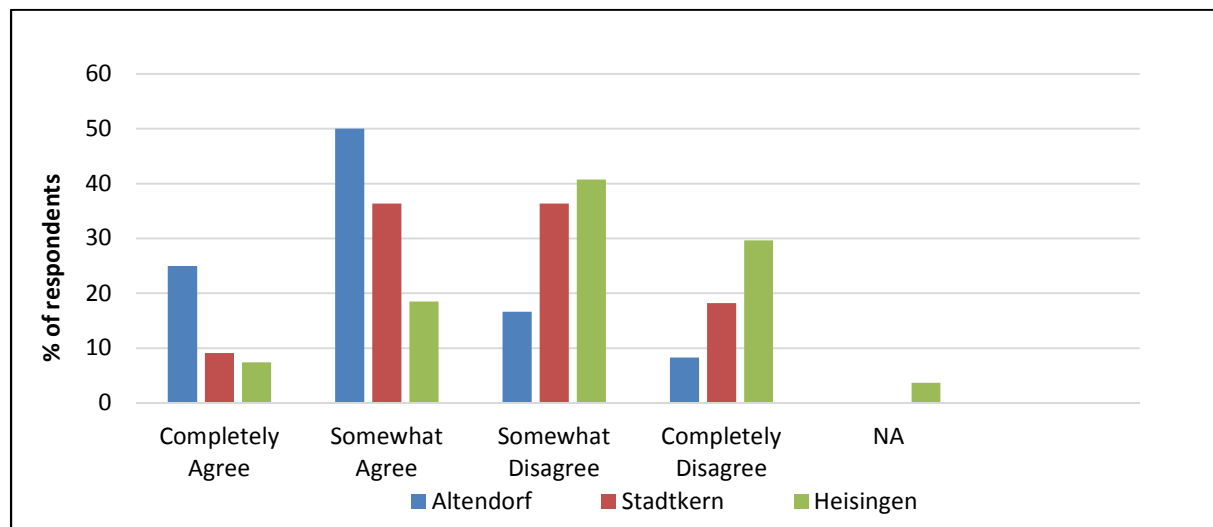


Source: KWI Survey, 2012

This difference in income can again be attributed to the historic as well as the demographic factors. The gentrification discussed earlier in this chapter is resultant of this disparity in income. Many of the neighbourhoods in the north house the families of the industrial workers with immigration background, who over time could not adjust to the changing nature of the economy of the *Ruhrgebiet* and were eventually rendered either redundant by the advancement of technology and/or became unemployed due the shifting of production to developing world (Weiguny, 2013);(see table 5-5). This deprivation of a steady and reliable source of income reshaped the demographic profile of the northern neighbourhoods. This is reflected in higher dependency on social support among the residents of Altendorf and Stadtkern (see figure 5-17).

Figure 5-16 shows the reported standard of living where respondents were asked if they believe that they have a high standard of living. The results are the reflection of the self-evaluation of individual's standard of living. Majority of respondents from Altendorf reported a high or somewhat high standard of living, which is opposite to most of the responses from Heisingen, where people mostly reported either somewhat or complete disagreement with their standard of living being high. Respondents from the Stadtkern did not provide any clear categorization of their self-reported standard of living.

Figure 5-16: Self-reported high standard of living



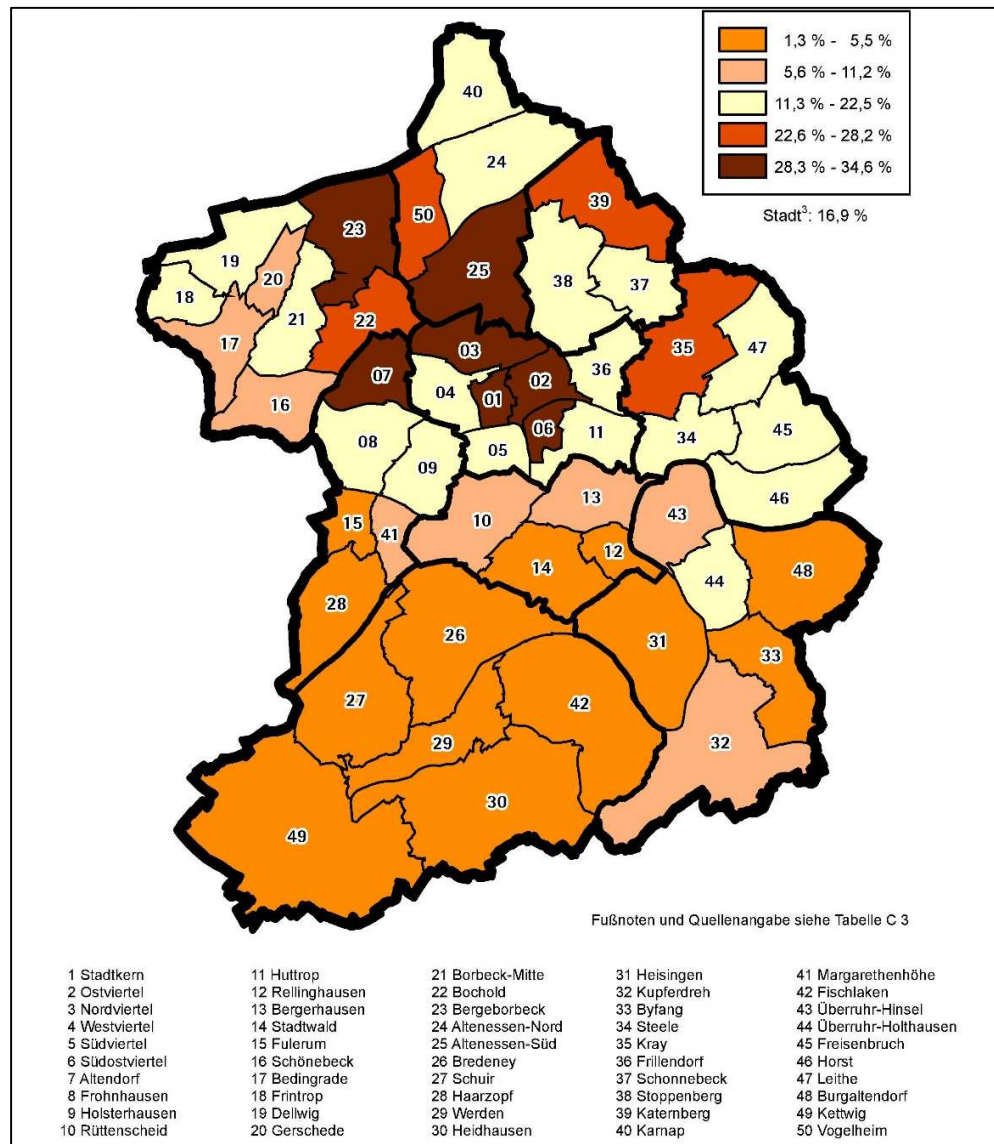
Source: KWI Survey, 2012

The self-evaluation of life is very fundamental to the sense of wellbeing. This is more subjective than relative, as despite having similar life/living conditions two different persons can evaluate their life conditions differently (Helliwell & Barrington-Leigh, 2010). However, higher sense of satisfaction with life (and standard of living) among residents enhances the sense of wellbeing and identity of area very significantly. The difference in the responses between the three CSAs can be related to their cultural, demographic and religious affinities. Altendorf which reports the highest agreement to high standards of living has a high percentage of dual nationals as well as nationals of immigration backgrounds who might feel more proud of what they have achieved in Germany while in case of Stadtkern the higher percentage of foreigners can influence this result. This relates with the similar findings from other countries, that found residents with immigration background to be generally more satisfied with their life than those from their countries of origin (Frank, Hou, & Schellenberg, 2014). The religiously conservative neighbourhood of Heisingen may also suffer from the inhibitions of residents in accepting and reporting high standards of life as well as from the high expectations (regarding the standard of living) that these residents have.

Table 5-5 shows the unemployment rates in the CSAs and the percentage of people who are on (any kind of) social benefit. The overall unemployment rate in Essen stood at 9.6% as on 31.12.2014 which is higher than the 2014 unemployment rate of Germany which was 5.0% of the total work force (OECD, 2017). Within Essen there are significant divergences between the neighbourhoods. Altendorf has almost double the rate of unemployment than the average for Essen. Stadtkern also shows very high rate of unemployment while Heisingen has very low level

of unemployment. This regional divide within Essen gets even more clear with the analysis of the people who are on (any kind of) social benefit as shown in figure 5-17.

Figure 5-17: People on Social Benefits



Source: Stadt Essen, 31.12.2014

There is a very substantial difference between the percentage of people on social benefits in Altendorf, Stadtkern and Heisingen. The percentage of people supported in the first two neighbourhoods is more than 12 times that of Heisingen which has a relatively very low percentage of people on social benefits compared to the average for Essen.

Table 5-5: Unemployment and Social Benefits

	Altendorf	Stadtkern	Heisingen	Essen
Unemployment %	17.3	15.6	3.2	9.6
% of people on social benefits	33.7	32.7	2.7	16.9

Source: Stadt Essen, 2014

It is evident from figure 5-17 that there is a geographic divide, with people in north more likely to depend upon social benefits than those in the south. The slope of this variation is very steep as the range of people on social benefits ranges from 1.3% in some southern neighbourhoods to staggering 35% for some neighbourhoods in the north including Altendorf and Stadtkern. The spatial spread of the percentage of residents who are younger than 18 years and are on social support is even more drastic. In the north-central neighbourhoods, including Altendorf and Stadtkern, 55-67% of residents of this age group receive some kind of social benefit as compared to as little as 1-10% in case of most of the southern neighbourhoods, including Heisingen (Stadt Essen, 31.12.2014).

The very high rate of unemployment and the dependency on social benefit among the residents of Altendorf and Heisingen can work as a wedge widening the gap between the identities of these neighbourhoods and southern neighbourhoods such as Heisingen. As the traditional mass employment industries in the north started shutting down, the work force that didn't have much of different skills and could not acquire new ones, gradually became unemployed and hence dependent on the state (Weiguny, 2013). Even more worrisome is the continuation of this trend among the younger population, who can acquire skills and can be employable; however they are largely dependent on the social benefits as well. This indicates that the capacity building (skill augmentation) programmes have not reached the older generation while the newer generations of resident is either lacking necessary skills as well and/or is facing hindrances in finding employment. The larger presence of unemployed people can create social nuisance as higher crime incidents are reported from Altendorf (see figure 5-31). It also creates a sense of insecurity and affects the identity of space negatively as often hordes of people can be seen loitering drunk throughout the day in these areas.

5.4 Association

This section deals with various parameters that are collectively used to understand the association that the residents from CSAs are likely to have with their respective neighbourhoods. Certain public events and opportunities such as weekly/community markets, sports clubs, participation in local politics, membership of local clubs etc. present the possibilities that a certain

neighbourhood provides to its residents for getting to know each other and the neighbourhood better (Government, 2008, p. 17). An easy access to these can enhance the association that a resident has with his/her neighbourhood.

5.4.1 Activities and avenues to associate

Based on the availability of data, two indicators are analysed here as the proxy measurement of association. The first indicator analysed is the presence of weekly markets in the neighbourhoods and the second is the presence of sports clubs. Weekly markets allow people to come together at regular intervals and share space for a common purpose (Government, 2008, p. 17). This fosters the sense of sharing and association with the place as well as with each other. Sports clubs though more exclusive in nature, foster the same feeling to even greater extent among their members and followers (Eime, Young, Harvey, Charity, & Payne, 2013).

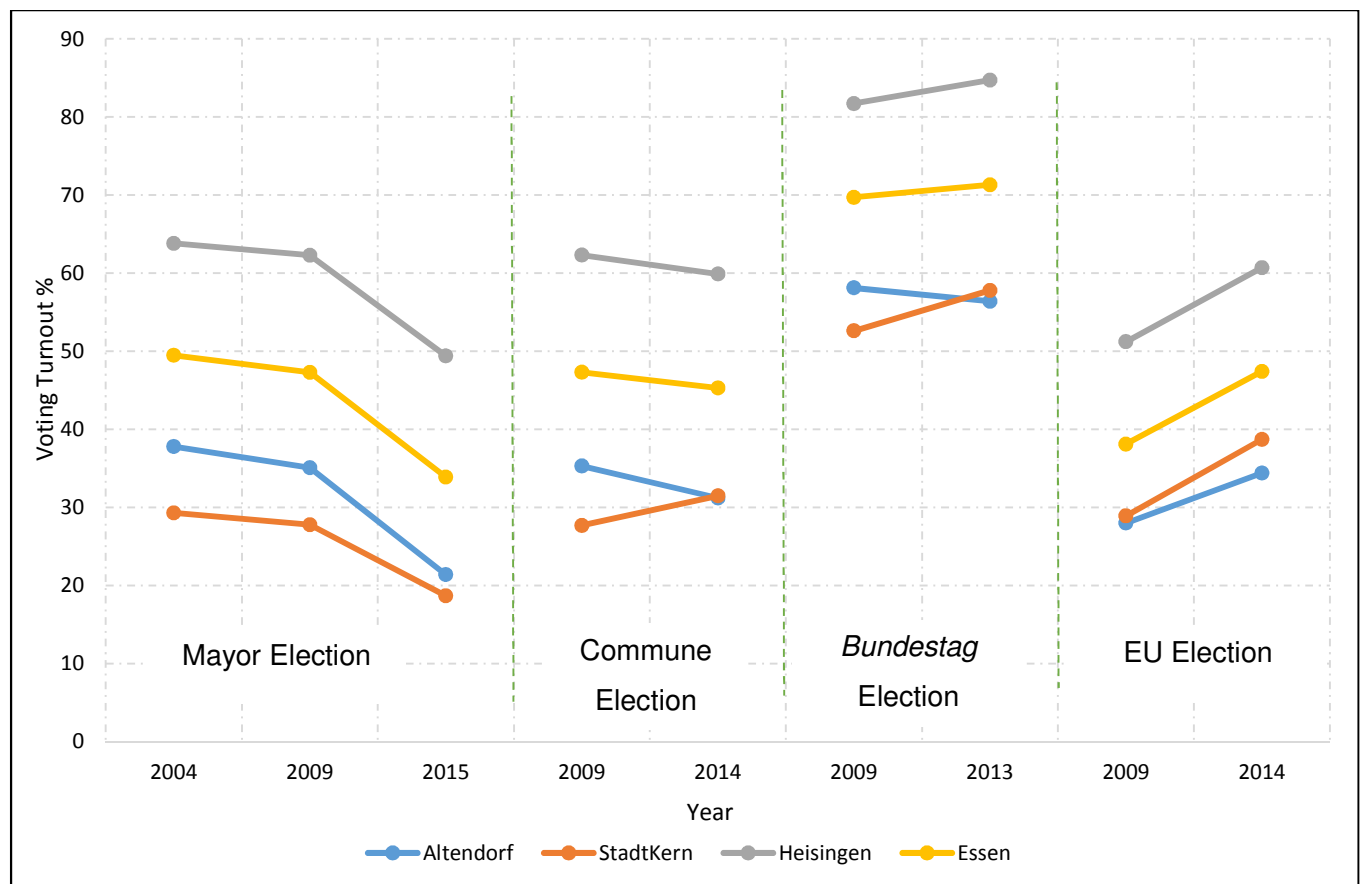
According to the data available from *EVV Verwertungs- und Betriebs GmbH (EVB)* (the association for weekly markets in Essen), as on 06.03.2017, Altendorf has a weekly/community market that is organized in the *Ehrenzellerstraße* which is open for five hours every Wednesday and Saturday. Stadtkern enjoys weekly/community market for nine hours every Tuesday and Friday at the *Markt 2* place. There is no weekly market in Heisingen and the nearest ones are located in the neighbouring localities of *Stadtwald* and *Kupferdreh*.

Heisingen is home to some highly-reputed sports clubs and it hosts many sports related activities. There are some sports clubs based in Altendorf as well. Stadtkern does not have any reputed sports club based there, though no confirming data in this regard was to be found. The presence of weekly market in Altendorf and Stadtkern provides a very positive avenue of association for the residents of these areas and fosters their sense of belongingness. However, the lack of organized sports facilities in the both neighbourhoods, especially in Stadtkern can diminish overall sense of belonging and association. The spatial layout of Heisingen along with the absence of avenues of association such as weekly markets can create a sense of loneliness among the residents and make it more difficult for any new residents to assimilate with the old ones. However, the presence of ample sports facilities is likely to have an opposite effect and enhance the sense of association and belongingness. Sports facilities however are age specific and may not be equally accessible to different age groups. This may limit the positive impact of sports facilities to only certain sections of the society.

5.4.2 Voting

Voting is one of the most significant exercise of the democratic franchise that we are part of. It allows people to decide their representation in policy making and at governmental levels which in turn can influence their lives and future. It enhances the sense of belongingness as well as the ownership. It transforms people from mere passive spectators into active urban citizens. The level of participation in local politics and the extent of voting in elections (local and others) can be argued as strong indicators of one's association as well as the willingness to participate in the functioning of their place of residence (OECD, 2012, p. 133).

Figure 5-18: Voting pattern in Essen



Source: based on the data from *Wahl Atlas*, Stadt Essen, 2015

Figure 5-18 shows the voting pattern in the three CSAs across different elections that took place in Essen between 2004 and 2015. There are two dominant patterns, first how people across the CSAs voted in a particular election and how people from a particular neighbourhood voted in different elections. It is interesting to note that the voting turnout in the mayor election for Essen has nosedived since 2004 across neighbourhoods which might indicate to a falling level of

willingness to vote for local issues/candidates but on the other hand voting turnout has increased for commune (similar to the neighbourhood) level elections across neighbourhoods. This indicates that people over years are more likely to associate politically with their neighbourhoods in Essen than Essen as an entity. This may be due to various factors which influence voting patterns and choices. Voting has been particularly high for the national (*Bundestag*) elections which indicates people's higher association and care for their common future with Germany. Over time people are showing increased political interest in the European Union (EU) as well which is evident from the overall increase in the voting turnout for EU election.

Another interesting observation from Figure 5-18 is that there is a substantial difference between the voting turnouts among the three CSAs. Irrespective of the type of election, voting turnouts in Altendorf and Stadtkern have remain drastically below the Essen average. The difference between the voting turnout in Altendorf and Essen average remains around 15-17% points (i.e. if Essen average voting turnout is 50% than the corresponding figure for Altendorf is around 35%). This gap widens by more than 20% points in case of Stadtkern which has witnessed some of the lowest voter's turnout among all 50 neighbourhoods in Essen. Heisingen shows a completely opposite picture to this with significantly higher than average voters turnout across elections by more than 10-12% points to the Essen average.

The differences as shown in these two voting patterns (inter-elections and inter-neighbourhoods) can be attributed to various factors. The most evident of which is the demographics. All three CSAs have different population with Altendorf having five times and Heisingen having three times more people than Stadtkern. The population mix between the neighbourhoods is also different as both Stadtkern and Altendorf have very significant proportion of dual nationals as well as foreigners residing there, who may not feel the same level of need or desire to participate in the democratic franchise as compared to a German citizen (Katsiaficas, 2014, p. 6). This highlights the need to raise awareness among the eligible voters as well as to remove any logistic hindrances (such as language) which may prevent willing voters from fully participating as research has shown (Katsiaficas, 2014, p. 2). Other factors such as unavailability of any suitable candidate, general mistrust with the government, lack of awareness etc. can also influence the voting pattern.

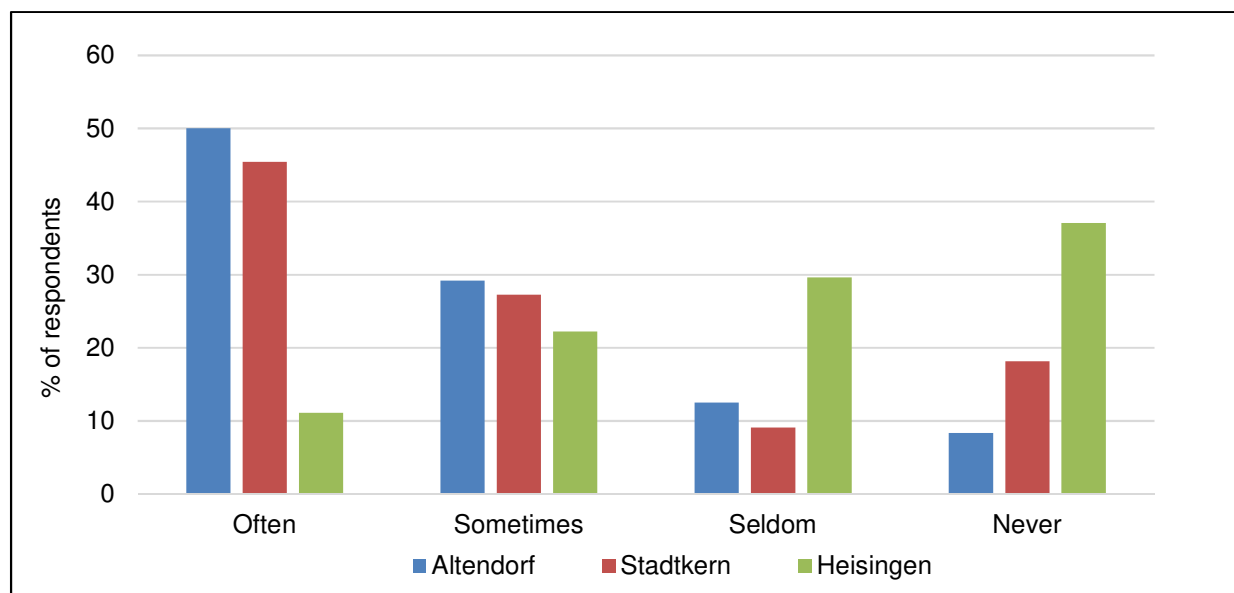
5.4.3 Experiencing the public space and life

Public spaces play a very important role in shaping our perception of the urban identity and good access to them can enhance residents' psychological wellbeing and social relationships, hence fostering a sense of community and satisfaction with life (Kuo, Sullivan, Coley, & Brunson, 1998).

Similarly, our attitude toward life affects our wellbeing as well (Reker, Peacock, & Wong, 1987). Using the data from the 2012 KWI Survey, two aspects of an individual's experience of public space namely visit to art galleries and exhibitions, and outdoor leisure activities are analysed below.

Figure 5-19 shows the frequency distribution of visits to the art galleries and other public spaces in Essen as reported by the respondents from the three CSAs. There is a very high percentage of respondents from both Altendorf and Stadtkern who go often or sometimes to art galleries and exhibitions while the majority of respondents from Heisingen either seldom or never visit them. This could be due to the fact that both Altendorf and Stadtkern are located much closer to the city centre and other neighbourhoods of Essen where these exhibitions and art galleries are located. In this case, the proximity factor is likely to influence the usage significantly. An enhanced access to public transport in Heisingen may address this situation.

Figure 5-19: Visit to Art galleries and exhibitions



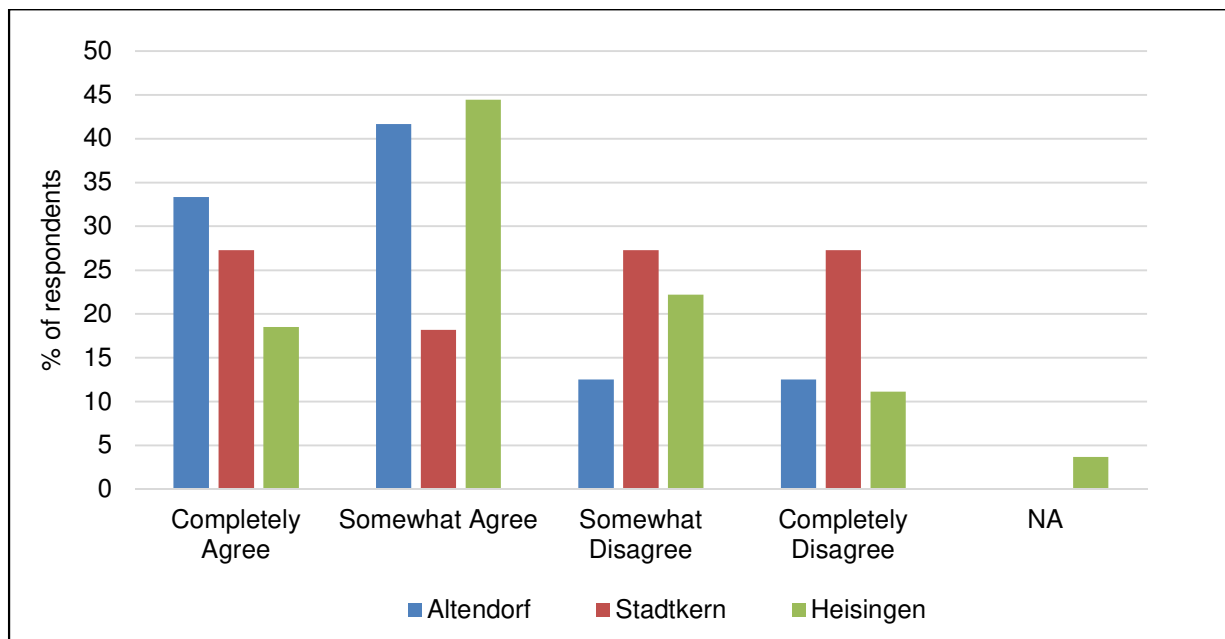
Source: - KWI Survey, 2012

One of the questions from KWI survey asked respondents about if they would agree that they go out (for leisure, entertainment etc.) often and the results were self-reported. As figure 5-20 shows, more than one third of the respondents from Altendorf strongly agree to it, followed by more than one fourth in case of Stadtkern. Almost half of the respondents from Heisingen report partial agreement to it while one fifth of them strongly agree with it. Stadtkern presents a very scattered

picture with respondents almost equally distributed among all four categories with 54% percent disagreeing and 46% agreeing.

Access to leisure and entertainment is very vital for rejuvenation in the urban life as they can reduce stress (Larson, Jennings, & Cloutier, 2016). Heisingen has very good access to River Ruhr and *Baldeneysee*, which provide excellent venues for leisure and entertainment related activities (as many sports and cultural events are organized around Ruhr, especially during the summer). Altendorf as well has *Niederfeldsee* and *Krupp-park* in vicinity however this also indicates the overall positive attitude of the residents from Altendorf toward leisure activities, who despite not having as good access to leisure activities as Heisingen, are still very positive about it.

Figure 5-20: Self-reported frequent outdoor leisure activities



Source: - KWI Survey, 2012

The results of these two survey questions are the likely manifestation of the different physical environment as well as the demographics of the CSAs. Altendorf and Stadtkern being located in the proximity of various art galleries and exhibition places provide residents with higher access to them while Heisingen provides residents with very high access to outdoor leisure activities along the Ruhr river, at *Baldeneysee* and in various other open spaces around it. The physical location of Stadtkern facilitates little access to the leisure areas. The difference in the demographic mix of the three CSAs can also influence how people use the space as the people from different

backgrounds may use same space differently. Different cultures have different levels of inherent gender discrimination in the usage public space, this can limit the usage of public spaces despite good access to them (Arjmand, 2016, p. 5). Enhanced culture assimilation and awareness campaigns can be used to address such situations as an enhanced access to public spaces, especially parks can directly enhance the sense of personal as well as community wellbeing (Larson, Jennings, & Cloutier, 2016).

5.4.4 Integration into the rest of the city

One of the key factors that enhances the sense of association in a neighbourhood is its linkage to the rest of the city (Lynch, 1960, p. 49). Over time, linkages have spread from mere physical

Figure 5-21: Public transport network in and around Altendorf



Source: map provided by the *Essener Verkehrs-AG* (EVAG), 2016

realm to digital means as well (Yuan & Medel, 2016). This research analyses the physical aspect of linkage in detail and the data from digital linkage is selectively analysed.

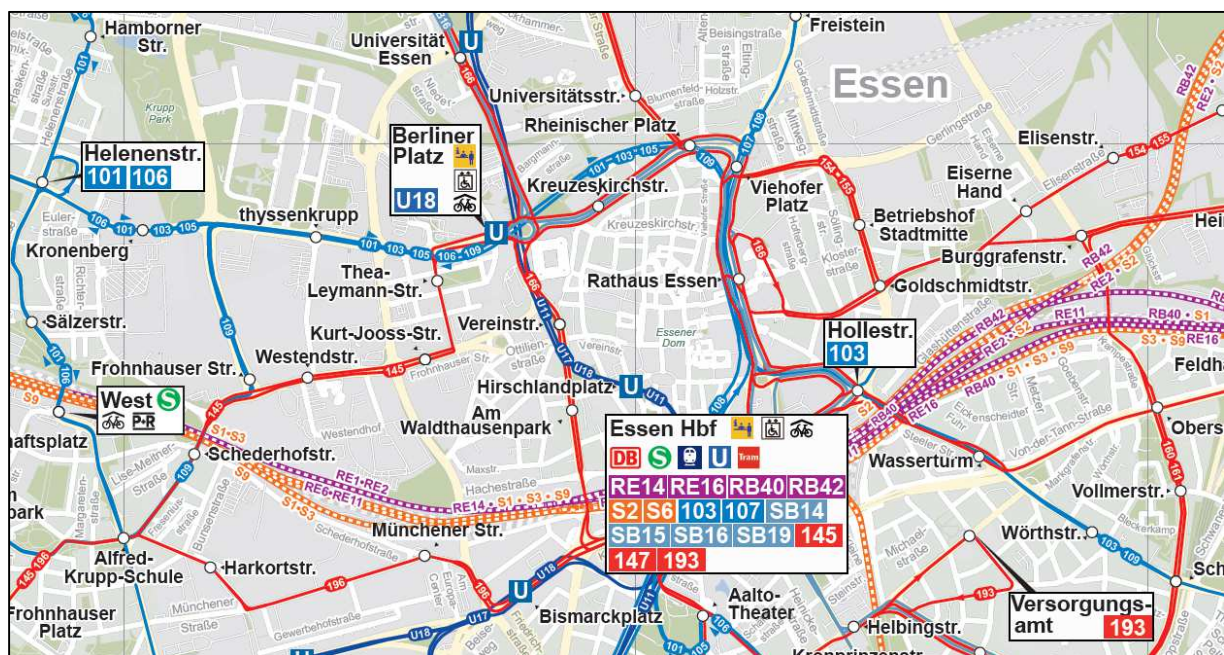
5.1.1.1 Public Transport and connectivity

Public transport forms the backbone of the connectivity for most of the neighbourhoods as it allows people to travel within and beyond their neighbourhoods. This helps in feeling productive and

resourceful and weaves the mental image of the space for the user as well (Lynch, 1960, p. 50). Figure 5-21 shows the public transport network in and around Altendorf. Trams (*Straßenbahn*), Metro (*U-Bahn*) and Bus networks are denoted by blue, dark blue and red lines respectively. The broad orange line represents the train tracks. Similar networks for Stadtkern and Heisingen are shown in figure 5-22 and 5-23 respectively.

The public transport network in Altendorf is well accessible from across the neighbourhood (see Annexure A-3). Tram lines form the core of this network as they run along the main arteries. These are further supported by the bus lines passing along the periphery. Two local train stations located along the southern edge of Altendorf further strengthen the public transport network in the area. Altendorf has good access to public transport from across the neighbourhood which facilitates its residents' daily life as well as enhances their access to various spaces, in Altendorf and rest of Essen.

Figure 5-22: Public Transport network in and around Stadtkern

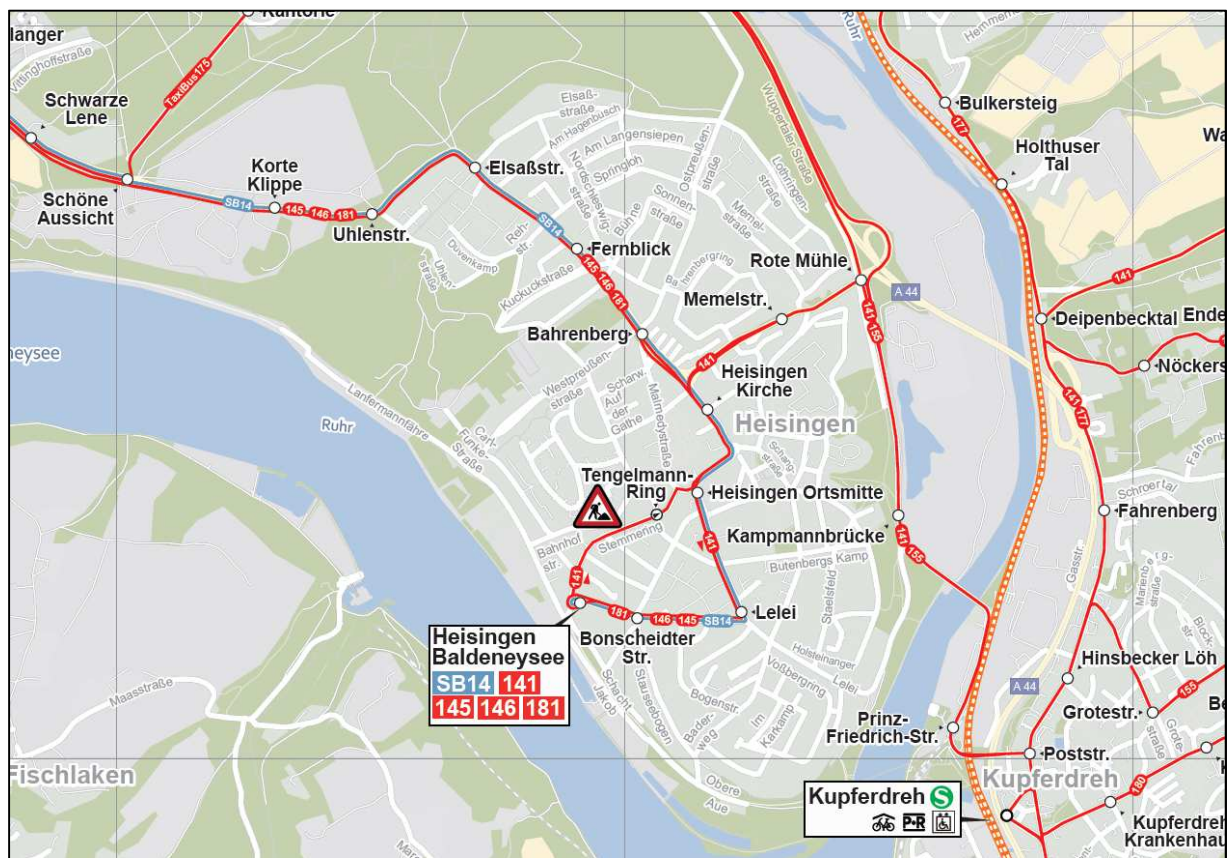


Source: map provided by the *Essener Verkehrs-AG* (EVAG), 2016

Stadtkern houses the train public transport hub of Essen, *Essen Hbf* which serves as the main origin and termination for many bus and trams lines in addition to the vast network of German Railways (*Deutsche Bahn* or DB) that passes through it. All three metro lines in Essen pass through Stadtkern providing it with very high access to the rest of the city. The majority of night buses start and terminate at the *Essen Hbf*. In general, the access to public transport is very high

across Stadtkern. However, this massive network of roads and traffic (around Stadtkern), can cause noise pollution and deplete the aesthetic quotient of the area which in turn can diminish its quality of life. The inner parts of Stadtkern however have lesser traffic as compared to the outer parts and a large part of it is pedestrianized having many leisure and retail offering. This indicates that the strong public transport network in the periphery and pedestrian zones in the inner parts, provide a higher quality of life to residents of Stadtkern.

Figure 5-23: Public transport network in and around Heisingen



Source: map provided by the *Essener Verkehrs-AG* (EVAG), 2016

Due to its geographic location, the public transport network in Heisingen is different from the other two neighbourhoods. There is one major public transport artery along the *Heisingerstraße* which is served by the bus network connecting it to the north of Essen. There is another bus line that passes along the eastern periphery of Heisingen and connects it further to the areas across the Ruhr river. There is one local train station across the Ruhr river in *Kupferdreh*. The overall public transport network in Heisingen is less accessible than the other two CSAs (see annexure A-3). This might affect how people access the activities and spaces in rest of Essen (see figure 5-19).

Table 5-6 summarises the characteristics of the public transport network from all three CSAs. Stadtkern being the centre of city has the most accessible public transport network, which is served by bus, trams and metro in addition to the trains. Altendorf is served by buses, trams and trains. The only direct access to Heisingen using public transport is the bus network. It takes an average of around 15 minutes from Altendorf to reach *Essen Hbf* while it takes around 25 minutes to reach there from Heisingen using the public transport.

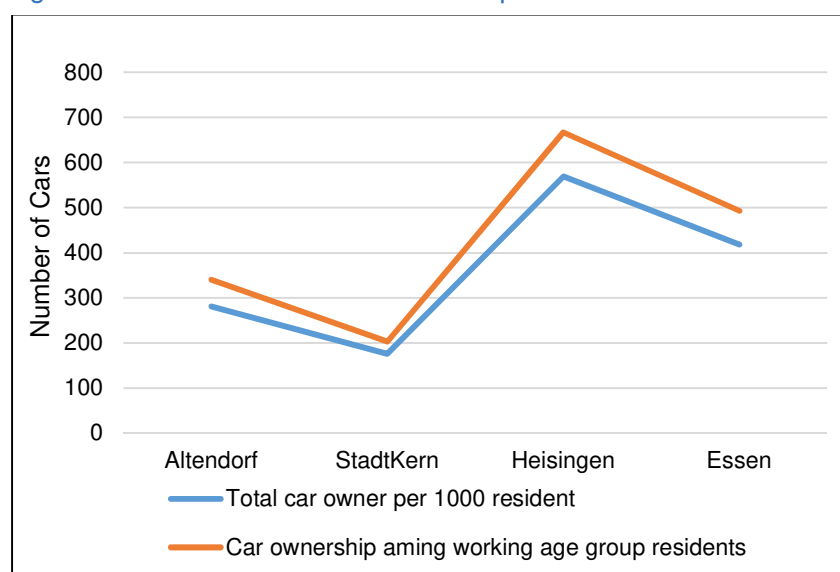
Table 5-6: Public transport alternatives and travel time

Number (of)	Altendorf	Time taken in minutes to reach city center	Stadtkern	Heisingen	Time taken in minutes to reach city center
Bus lines	3	N/A	8	5	25
Tram Lines	4	10	6	0	0
U-Bahn	0	0	3	0	0
Night Buses	3	15	13	1	24
Overall Punctuality*	81%		81%	81%	
Source: - by author based on data accessed online on www.evag.de , 06.03.2017; * provided by EVAG, average punctuality of all public transport means between July 2016 and January, 2017 (see annexure A-4)					

Private vehicles provide another alternative to people to fulfil their transportation and related needs, however, they also contribute to congestion and pollution. Figure 5-24 shows personal vehicle ownership per 1000

residents for the three CSAs. Personal vehicular ownership is lowest among the residents from Stadtkern, followed by those from Altendorf and highest in Heisingen. This corresponds largely with the preceding public transport network analysis for these areas. The vehicular ownership remains higher

Figure 5-24: Personal vehicle ownership

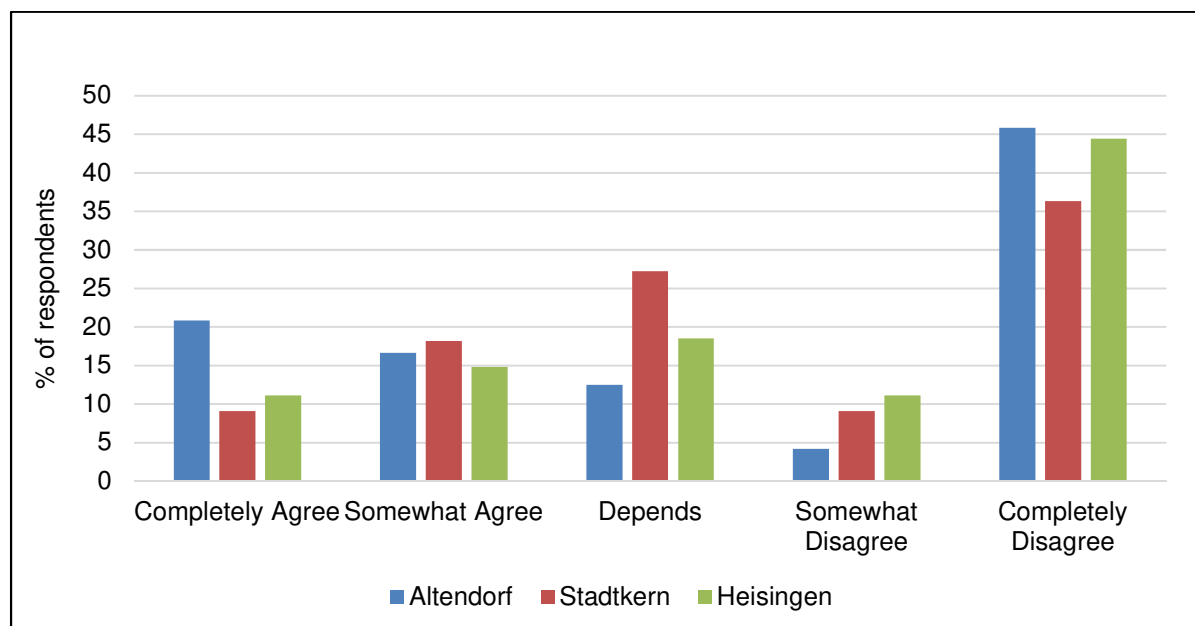


Source: - Based on data from Stadt Essen, 30.09.2014

among the working age group than the average across three neighbourhoods as well as in Essen a whole.

This is largely related to the physical location of the CSAs and their access to public transport. The effective use of public transport also depends on the user attitude towards it. Many of the residents in the southern part of Essen work in the nearby cities (especially in Düsseldorf) who prefer shorter point to point commute using personal vehicles than time consuming public transport that involves interchanges as well. This is just reverse in the inner parts of city, where public transport is much faster and economical than using private vehicles. In the perspective of Germany's commitment to international climate agreements and its aim to significantly reduce its carbon emission, and the negative affect of long daily commute on wellbeing, a broader policy to regulate the usage of private vehicles is needed (Fransen & Levin, 2016); (Hilbrecht, Smale, & Mock, 2014). The recent development in this direction, including the proposed emission cuts of diesel vehicles and prohibiting them from inner districts in some cities, will need to be supported by public transport augmentation (Tovey, 2017); (Reuters, 2017). However, this needs to be supported by awareness campaigns that can promote a modal shift.

Figure 5-25: Willingness to use public transport more if the frequency improves



Source: - KWI Survey, 2012

Figure 5-25 shows the reported willingness of respondents from three CSAs to use public transport more if the frequency of service improves. It follows a similar pattern across the three neighbourhoods with more than one third of the respondents stating that they will not use public

transport even if the frequency improves. However, the rest of the respondents are almost equally scattered in their attitude toward the enhanced use of improved public transport facilities. The respondents from Heisingen are slightly less positive than those from the other two CSAs.

This may be due to the fact that many of the residents from all three CSAs work far from their home (see figure 5-13) and they may find it economical, convenient and time saving to use their personal mode of transport than the public transport. Heisingen being located far from the city centre and having relatively lower access to public transport, manifests this more than other two CSAs. User's attitude toward public transport is influenced by many variables as well as cultural factors such as the level of service, lifestyle, socio-economic characteristics, journey type and travel time, modal split and other situational variables (Beirão & Cabral, 2007). Any change in one of these can influence how people perceive and use public transport. This highlights the complex nature of travel behaviour of people and calls for promoting behavioural changes in the users by addressing the suitable variables as well as augmenting the public transport and making it optimally seamless.

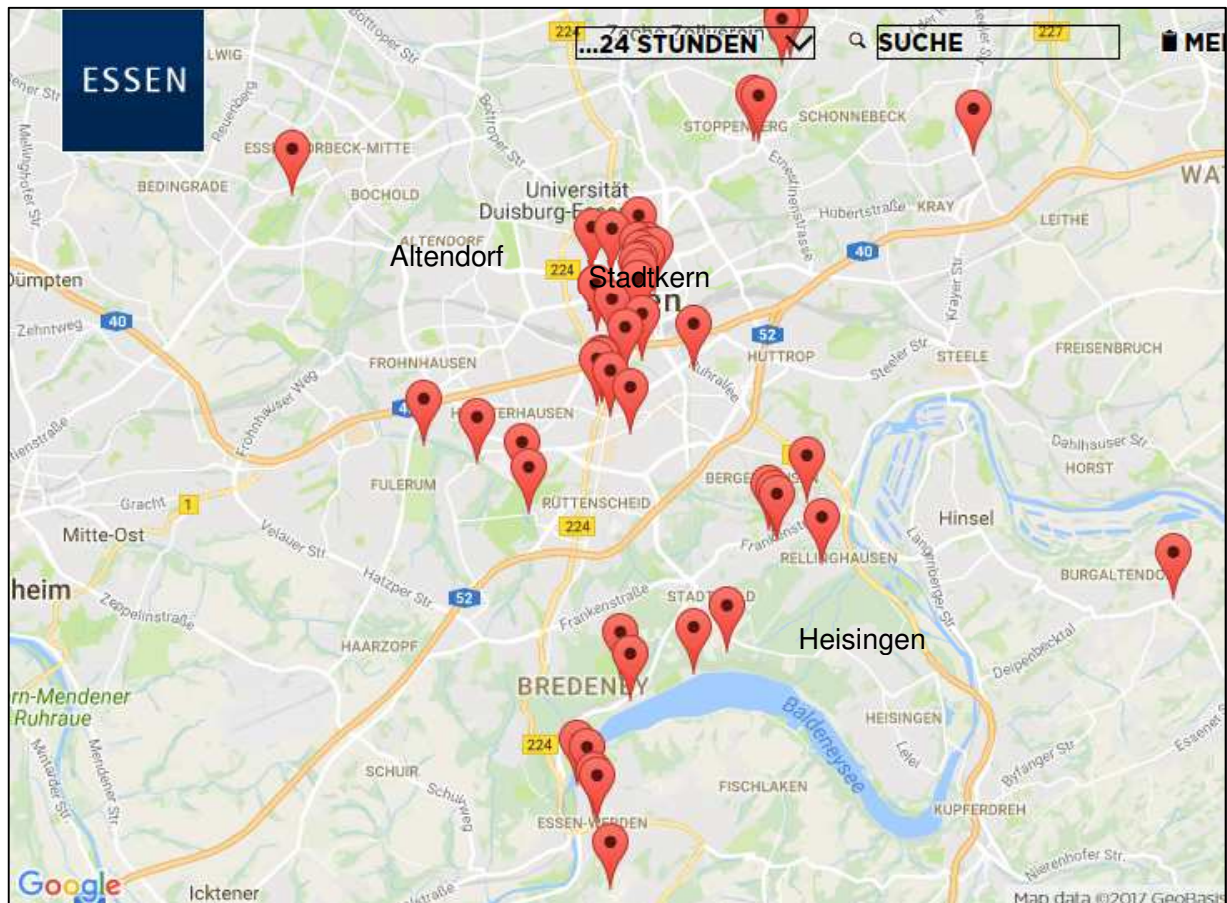
5.4.5 Places of city wise importance

Places and usages that cater to people beyond their immediate neighbourhood work as pull factors for people from across the city and beyond (to visit that specific area) (Lynch, 1960, p. 48). They strengthen the bonds between different neighbourhoods and often enhance the image of the specific area, as highlighted in chapter IV with the examples from Medellin and Rio de Janeiro. Figure 5-26 shows the major tourist attractions in Essen. There is a high concentration of places of interest in the city centre (Stadtkern) while there are no officially listed attractions in either Altendorf or Heisingen. But owing to its natural beauty and large river front, Heisingen attracts people willing to enjoy the pristine surroundings of the river Ruhr. *Baldeneysee* lake which forms the southern border of Heisingen is a major attraction for residents from across Essen. In addition to tourist's attractions, Stadtkern also houses the CBD as well as the main retail district and the Essen central station.

All these have large catchment areas and cater to people from across Essen and beyond. There are no such activities/usage in the other two neighbourhoods except regular water sports events that take place in the *Baldeneysee* (close to Heisingen) which attracts many visitors especially during summer. The neighbourhood of *Rüttenscheid* over years has emerged as alternative location of retail and night life in Essen which may reduce footfalls in Stadtkern. Altendorf on the contrary has very little to offer to outsiders, which might dilute its identity as perceived from the outside.

This can be addressed by effectively highlighting the industrial and historical heritage of Altendorf, the new recreational activities it offers and by locating usages that can attract more people. The development of *Kronenberg* shopping centre in the south-eastern corner of Altendorf supports this approach.

Figure 5-26: Tourist attractions in Essen



Source: - https://www.essen-tourismus.de/essen-tourismusinformation/sehenswuerdigkeiten_1/startseite.de.html#
accessed on 22.02.2017

Table 5-7 summarises the attraction potential for the non-residents from the three CSAs. Stadtkern has very high attraction for non-residents to visit it. Heisingen has moderate potential while Altendorf has low potential for the same.

Table 5-7: Attraction potential by non-residents

Neighbourhood	Attractions	Attraction potential
Altendorf	Lacks any significant attraction	Low
Stadtkern	City Centre, main shopping district as well as the CBD, mostly visited by people from across Essen for shopping, work and as transportation hub (<i>Hbf</i>),	Very High
Heisingen	<i>Baldeneysee</i> , sport clubs	High
Source: - By Author based on the information available online from Essen Tourism, 2017		

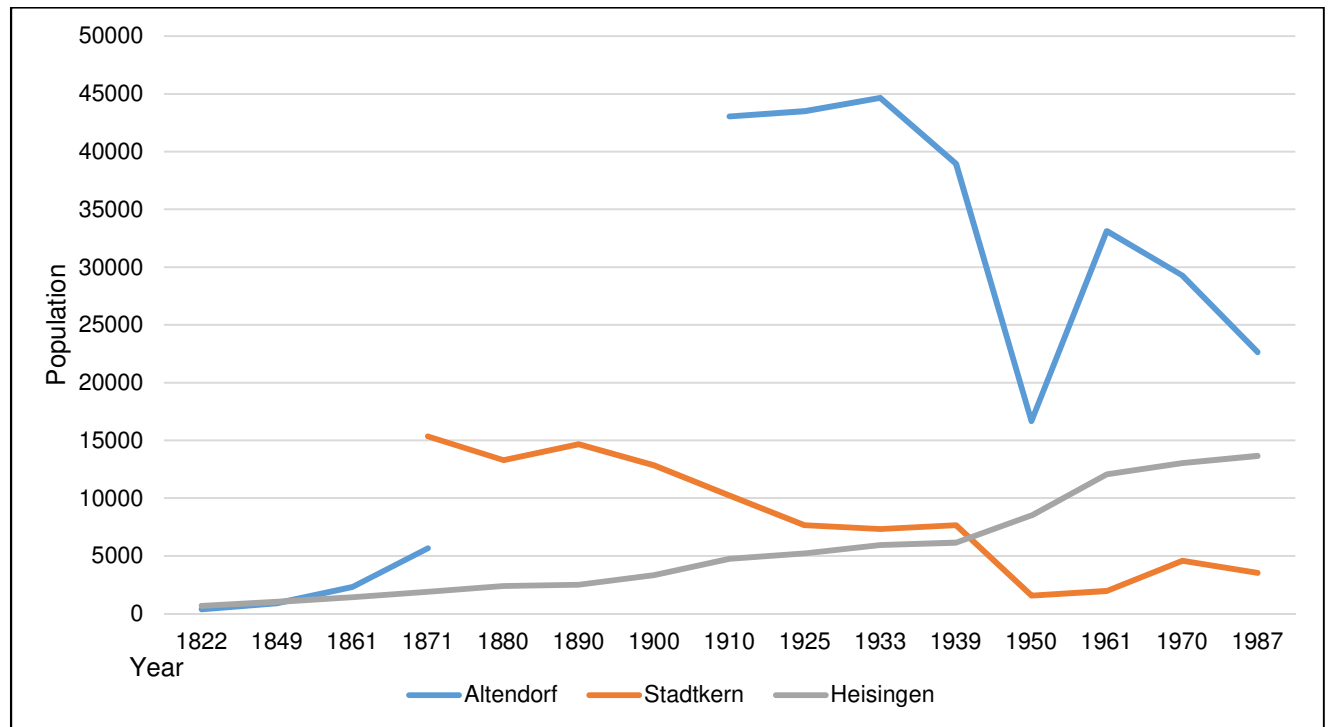
5.5 History

The history of an area plays a very significant role in shaping up its identity and how people feel about it (Lynch, 1960, p. 46). Figure 5-27 shows the historical population growth of the three CSAs. The population data provided by the research published by the *Essner Geographische Arbeiten* (Heinen, et al., 1990), spans over almost 170 years, though there are some time periods during which data for one or more neighbourhood could not be found. The data for Altendorf from year 1871 and 1910 could not be found. Similarly, the earliest data for Stadtkern is available from year 1871. While in certain cases this may be due to the unavailability of the data itself, others may be due to various reasons including the changes in political and administrative boundaries.

All three areas have had a very different population growth over these years. While both Altendorf and Heisingen started with very similar population, they followed different trajectories. Heisingen witnessed a steady and very gradual rise in population over these years. The rate of increase remained slow but positive until 1939 after which it accelerated till 1960. This coincides with the historical growth of this area which witnessed gradual suburbanisation and moving in of people which gave Heisingen its present character of the upper middle class residential neighbourhood. The trajectory of Altendorf consists of various very rapid accelerations and decelerations. Due to its rich industrial history and suitable location, it witnessed a very strong population growth with the advancement of industrialisation. This explains the almost 10 times rise in population between 1871 and 1910. The population peaked around 1933 before falling very drastically during the second world war. The population of Altendorf shrank by almost two third during this time. It increased again after 1950 with the implementation of the Marshal plan and the redevelopment of the former West Germany but the eventual fall of industries in the Ruhr region meant the loss

of employment which started pushing people out of here. At the same time, more residential alternatives started coming out which attracted some population from Altendorf as well.

Figure 5-27: Historic population growth of CSAs



Source: by author based on (Heinen, et al., 1990)

The population growth trajectory for Stadtkern followed an overall downward trend with population shrinking slowly over years. As it was the main commercial centre of this region during late 19th century, in 1871 it had a relatively higher population than its surrounding areas. However, its fall as the main trade and commerce centre was perpetual and by 1939 it had lost more than half of its population owing to various reasons including a growing trend of residential suburbanisation. The second world war witnessed its population falling by almost 80%, between 1939 and 1950. Essen started rebranding itself as the City for Shopping “*Die Einkaufsstadt*”, which resulted in retail and commercial land uses pushing out the residential use which, along with the steadily increasing suburbanisation, eventually kept the population growth of Stadtkern to a relatively lower level.

Industrial activities in Essen were located most to the north of *Essen Hbf* (and Stadtkern), and these areas including Altendorf witnessed a very significant migration of workers after second world war. The first wave of migrants came mainly from Italy and other southern European

nations. The next wave of migrants predominantly consisted of Turkish industrial workers and then came the nationals from former Soviet Union countries (Glitz, 2012). Family members of all these immigrants also intermittently kept on coming to Germany. All these immigrants over time settled preferably in the northern part of Essen which is reflected in the city demographics. As over time, many of these migrants were rendered unemployed, this had a direct impact on the quality of life including housing in this area. This reinforced the gentrification that had resulted from the early 19th century industrialisation time and has continued to this date (figure 5-28) (Heinen, et al., 1990).

5.5.1 Origin, Nationality, historical linkages

Figure 5-28 shows the percentage of foreigners and people with dual nationality among the residents across Essen. It is evident that former industrial neighbourhoods in the north of Essen have significantly higher concentration of these. This has a strong historical significance and causation. As many of the industries were located in the north, the workforce for these industries were housed closer to them, in what are the northern districts of Essen now, while most of those who could afford to live away from the pollution and cramped areas, preferred to settle in the southern neighbourhoods of Essen. This trend has continued even if most of the industries in the north have been shut down.

The central areas of Essen including Altendorf and Stadtkern have much higher concentration of foreigners as well as the dual citizens than most of the neighbourhoods in the southern part of Essen. Table 5-8 shows the absolute percentage of German nationals, dual nationals (people with dual nationalities - German as well another nationality) and foreigners as on 31.12.2016 in the three CSAs.

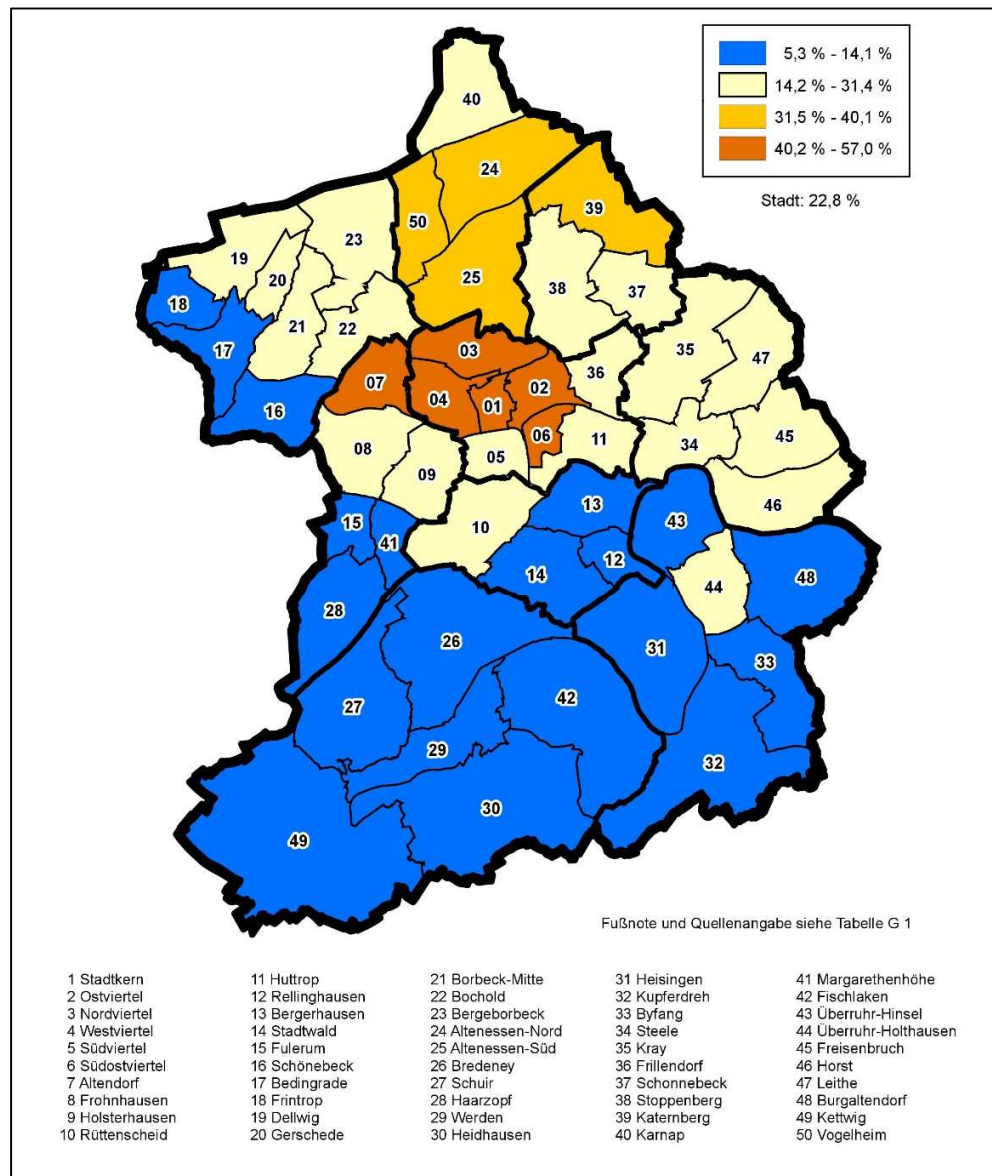
Table 5-8: Different types of nationalities among residents

	Altendorf	Stadtkern	Heisingen	Essen
German National	60.7	45.9	93.6	78.6
Dual Nationality	12.6	14.3	3.3	9.1
Foreigners	26.8	39.8	3.1	12.4
Source: - Stadt Essen, 31.12.2016				

More than 20% of total population of Essen consists of foreigners and dual nationals. This jumps to almost 55% in case of Stadtkern while falls to 6% in Heisingen. Altendorf has significant percentage of dual and foreign nationals as well with almost 40% of its residents falling into either of the two categories. The higher presence of foreigners indicates to the presence of a working age population which on the one hand pushes up economy of these areas but may also have

slightly lesser association and engagement, due to the temporary nature of stay of this working foreign population.

Figure 5-28: Foreigners and dual nationals in Essen



Source: - Stadt Essen as on 30.09.2015

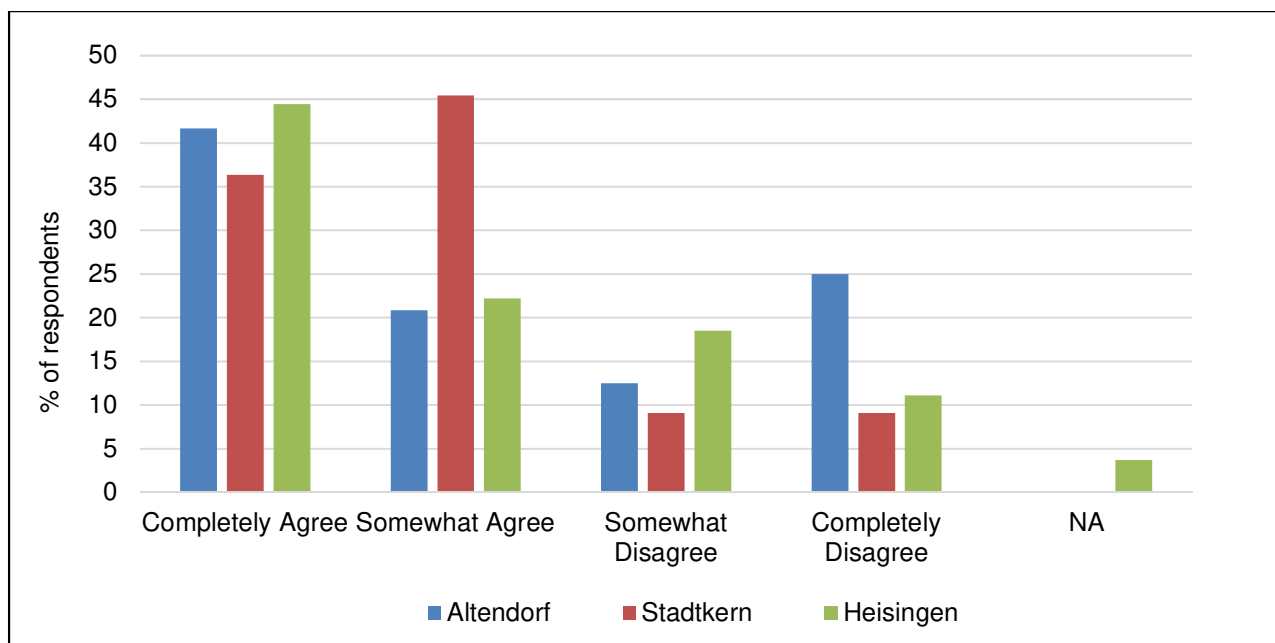
The dual nationals in case of Essen are likely to be mostly of Turkish origin who need not be of the working age group only, unlike foreigners. This has contributed to the ethnic segregation in Essen like rest of Germany and has posed some social and cultural challenges (Glitz, 2012) which are gradually getting addressed. This makes Stadtkern different from the rest of two CSAs. With

the increasing trends of globalisation, the percentage of foreigners is likely to increase over time which can provide another dimension to the identity of these neighbourhoods.

5.5.1.1 Values and traditions

Values and traditions are the reflection of people's beliefs and their sense of identity. Figure 5-29 presents the self-reported adherence to traditional family values among the respondents from the three CSAs.

Figure 5-29: Adherence to traditional family values



Source: - KWI Survey, 2012

A very significant percentage of respondents from all three CSAs strongly agree that they adhere to the traditional family values. Almost two third of respondents from Stadtkern and Heisingen agree to a complete or partial adherence to traditional family values. While close to 40% of the respondents from Altendorf either partially or fully disagree from it. This evident contrast between Altendorf and Stadtkern may be related to the difference in demographic profile of the CSAs. Most of the residents of Heisingen are German nationals of German ethnicity, with very few percentage of dual nationals and foreigners. This homogeneity might provide them with a sense of how they are different from the neighbourhoods in the North and to maintain this sense of distinction, they might prefer to adhere to the traditional values. This is also supported by the findings of the Eurobarometer survey (see figure 5-40) where more than 60% of respondents don't feel that foreigners are well integrated into their societies. Stadtkern has significantly higher percentage of

foreigners who might tend to adhere to their traditional values (from their lands of origin) in order to define their identity in a foreign land. Altendorf is a very interesting case as it has a strong presence of dual nations. The likely reason for more than 40% of them to partially or fully not adhering to the traditional family values can be the shifting identity and feeling closer to the German values among the second generation of immigrants, who are born and raised in Germany, and they might find the German values to be more suitable for them, than the traditional family values that their parents had brought along from their countries of origin. In general people who are more religious and adhere to traditional values are more likely to report higher level of satisfaction with life (Bingham, 2016).

5.5.2 Image

In today's world, media plays a pivotal role in creating and maintaining a certain image of an area. Though there are various other factors, the vital role that media (print and digital) plays is undisputable. To understand how the three CSAs are covered in print media, the archives of one the leading newspaper of the Ruhr region, the *Westdeutsche Allgemeine Zeitung* (WAZ) which is published in Essen were analysed. The selection of news is based on its relevance to the neighbourhood and it is done in (time-wise) descending order, i.e. starting with the latest news in February 2017 and then going backwards for the first 300 relevant news articles. Out of which 233 news articles fit these criteria and are further analysed for this research. Out of the 233 news articles, 98 are related to Altendorf, 38 to Stadtkern and 97 to Heisingen. The relatively lower number of articles concerning Stadtkern is due to the fact that, being the city centre as well as the geographical, political and administrative hub of Essen, most of the news reported from Stadtkern pertain to entire Essen or beyond.

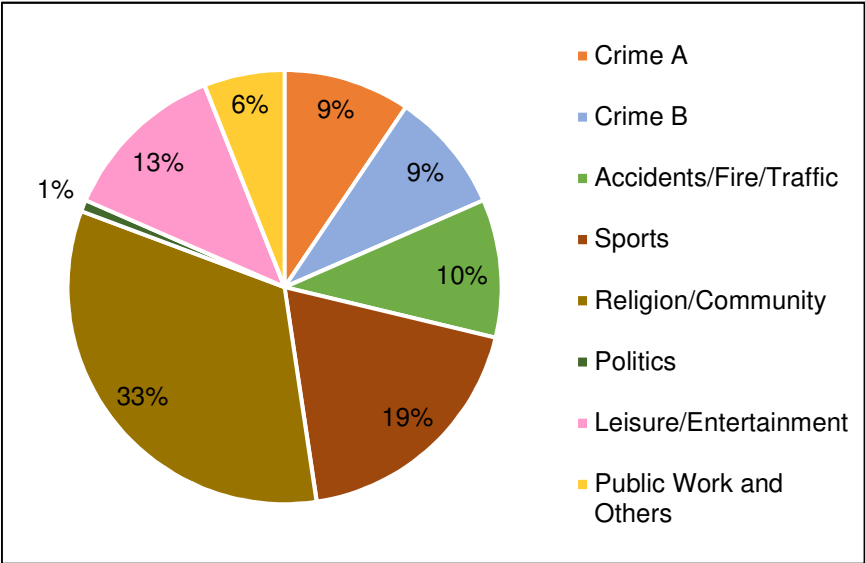
Table 5-9: Types of news analysed

News Type	Explanation
Crime A	Non-life threatening crimes such as robbery, mugging, fights, theft, burglary etc.
Crime B	Very serious crimes such as stabbing, murder, rape, drug related offence
Accidents/Fire/Traffic	Either related to traffic/fire accidents or disruptions
Sports	Pertaining to sports events, club news and celebrations
Religion/Community	Related to community including religion and general developments
Politics	Local political news
Leisure/Entertainment	Recreation, open space, festivals, events etc.
Public Work and Others	Related to work done by the government and others
Source: - by Author	

The list of all the news headings and their further classifications is attached as Annexure A-2. To analyse the reports better, the news is divided into 8 categories as shown in table 5-9. These categories have been defined based on the similarity and nature of reports.

Figure 5-30 shows the overall breakup of all 233 articles into 8 different news types. One third of all the news reported can be categorised as belonging to Religion and Community related issues. Sports news form another major chunk of reports and account for almost one fifth of the reports. Reports related to leisure and entertainment are the next prominent news category. However, close to 30% of news reports cover topics related to non-fatal and serious crimes, traffic and accidents. The percentage of serious as well as non-fatal crime related reports is same. There are relatively fewer reports related to public works and very few about the local politics. The type wise break up of news demonstrates the calm

Figure 5-30: Break up of news by types

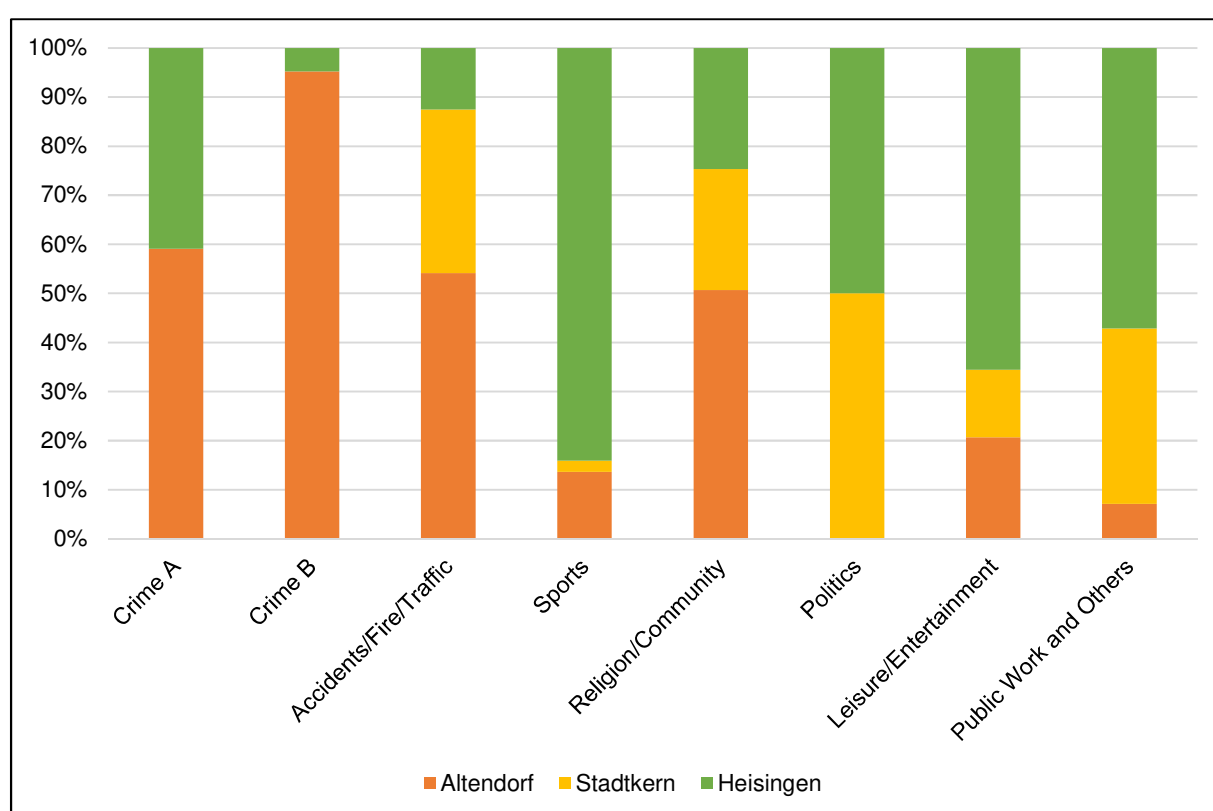


Source: by Author based on Annex A-2

and normal way of life in these neighbourhoods in general. Barring reports related to crime, most of the other news can find similarity in other residential neighbourhoods in Germany. This also supports the selection of the three CSAs as the representative of other neighbourhoods in Essen and the findings from these CSAs can be carefully extrapolated for rest of Essen as well. These reports are further analysed for every specific news type. Reports are categorised to understand the overall coverage of the three CSAs as well.

Figure 5-31 shows the type wise aggregation of reports. Altendorf is reported as the origin of majority of crime related news though Heisingen is reported as the source for 40% of crimes pertaining to type A as well. Except one report from Heisingen, every report on serious crimes has been reported from Altendorf. Close to 90% of the reports related to traffic and accidents are reported from Altendorf and Stadtkern, with Stadtkern accounting for more than 50% of such reports. Sports as a category features as importantly as the two crime groups combined, but the neighbourhood wise reporting is very skewed as Heisingen dominates sports related news (more

Figure 5-31: CSAs in WAZ



Source: - By author based on the online archive of WAZ (www.waz.de) accessed in February, 2017

than 80% reporting) leaving the other two CSAs far behind, with Stadtkern counting for only one such report. The most prominent news type related to religion and community witnessed a better distribution among three CSAs with Altendorf reporting half of them and the rest two counting for a quarter each. As the number of reports analysed from Altendorf and Heisingen is almost same (98 and 97 respectively, 38 reports relating to Stadtkern were analysed), this indicates to a pattern of reporting where positive news are more likely to originate in Heisingen than Altendorf and vice

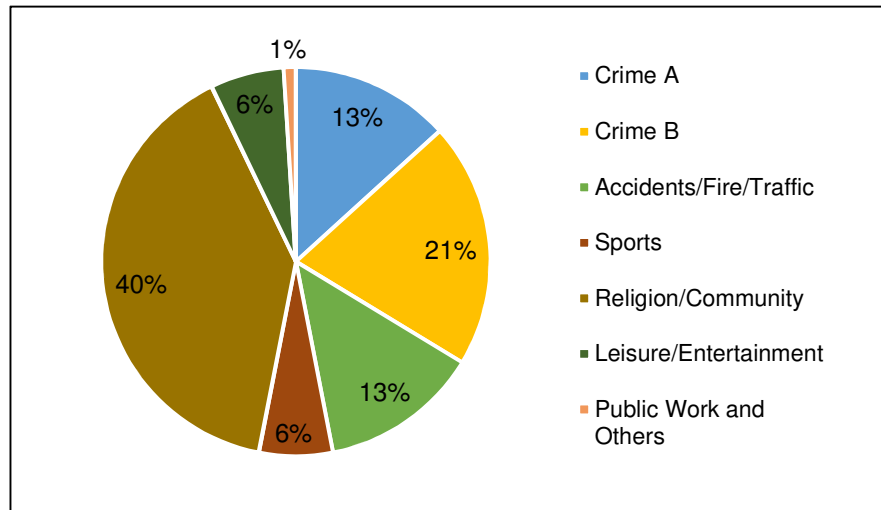
versa. The dominance of Heisingen in sports related news indicates to the better sport infrastructure and supportive ambience. The

dominance of crime related reports from Altendorf indicate to a worrying scenario which might be aggravated by the rising unemployment, higher population density, gentrification and inferior infrastructure. The prevalence of community related reports in Altendorf however indicates to the strong social fabric that is holding the neighbourhood together despite all the challenges. The higher percentage of traffic and other accidents originating from Stadtkern highlight the pressure on the infrastructure in the city centre.

One interesting observation emerges from the analysis of the reports related to politics where no reporting from Altendorf is found, though the overall number of

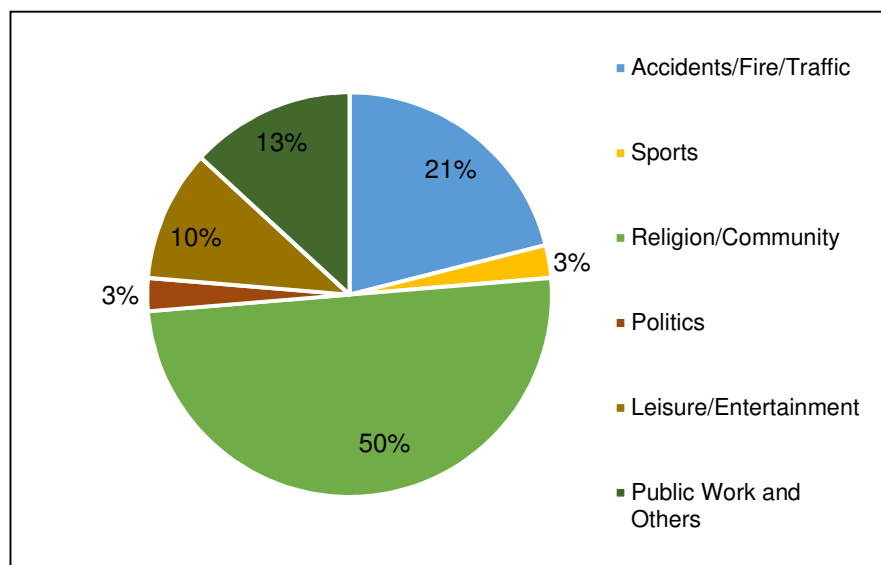
samples falling under this category is extremely low as compared to all other categories. Leisure and Entertainment is another significant category and Heisingen accounts for close to two third

Figure 5-32: Altendorf in WAZ



Source: - By author based on the online archive of WAZ (www.waz.de) accessed in February, 2017

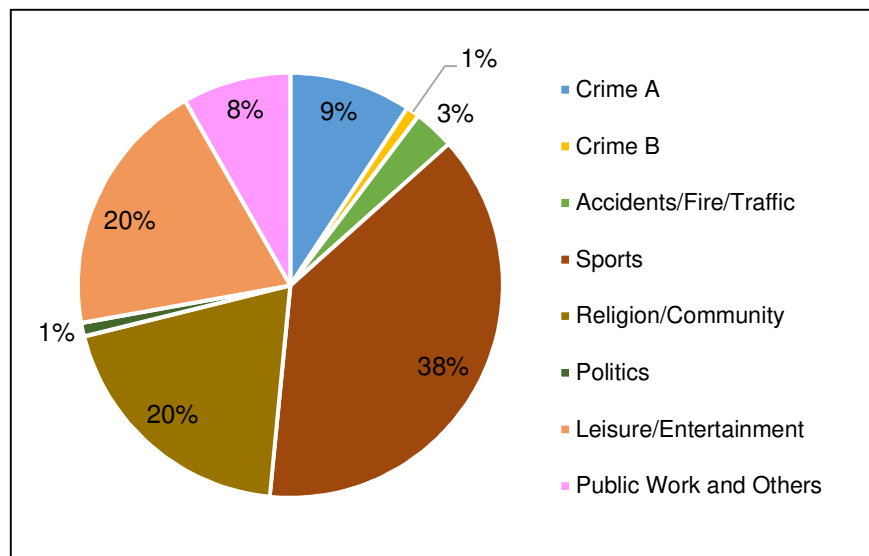
Figure 5-33: Stadtkern in WAZ



Source: - By author based on the online archive of WAZ (www.waz.de) accessed in February, 2017. Note that there are no reports related the crime categories (A&B).

of reports related to it with Stadtkern and Altendorf reporting fewer reports. This closely relates to the findings of figure 5-20 where respondents from Heisingen indicated good access to leisure activities. However, such reports from Altendorf are not frequent despite residents stating good access to leisure activities. This may be due to the dominance (and the shock value) of crime related reports. Close to 60% of reports related to public works pertain to Heisingen while Stadtkern accounts for close to one third of such reports, which is indicative of cities constant strive to improve these neighbourhoods. Each neighbourhood is further analysed for the breakup of the news originating from there.

Figure 5-32 shows the type wise break up of reports originating from Altendorf. Crime and Community are the two dominating topics. More than 20% of reports cover serious crimes (Crime B) while 13% cover non-fatal crimes (Crime A). They together make more than a third of the entire news. However, religion and community related news



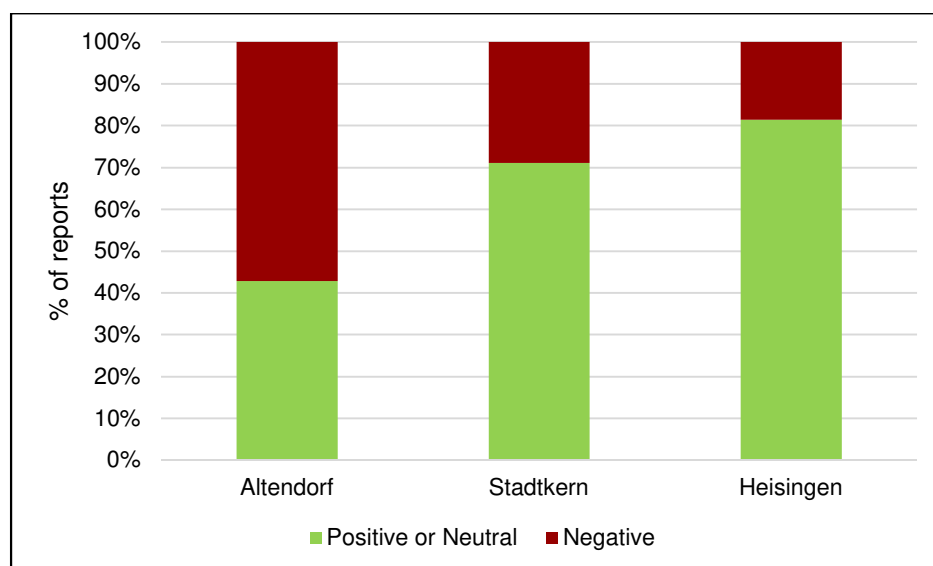
Source: - By author based on the online archive of WAZ (www.waz.de) accessed in February, 2017

make the largest chunk of the reports at 40%. Figure 5-33, 5-34 show the news type wise break up of reports originating from Stadtkern and Heisingen respectively. Reports from Stadtkern are dominated by the reports related to religion and community. Reports on accidents, traffic and fire are also more frequent than others. Among the sample, reports related to either crime types were not found while there were very few reports related to sports and politics as well. Leisure and entertainment, and public works are reported at 10% and 13% respectively. In case of Heisingen, sports news dominates the reports followed by the reports relating to leisure and entertainment, and religion and community. Crime reports sum up to 10% of the entire reports, with most of them falling under non-fatal crimes (crime A). Public works related reports find occasional mentions as well while there are very few reports related to either politics or traffic/accidents/fire.

The dominance of certain news type in reporting from a specific area indicates to the state of affairs in that neighbourhood as well as its larger image to the rest of city. Negative news has more of a shock value, people tend to remember them more than the positive/neutral news (Tugend, 2012). This creates a vicious cycle, where the urge for more sensational news can overshadow genuine positive news emerging from the area and can render the urban identity of the whole area negatively, despite it being different in reality. The news reporting from the three CSAs should be seen in this perspective as well.

All these reports are further classified as either positive and neutral or negative depending upon the message they convey and their context (see Annex A-2). This is done to render the broad image that these news articles are likely to render to their readers.

Figure 5-35: Nature of news in CSAs



Source: - By author

Figure 5-35 categorises the news into the broad categories, “positive or neutral” and “negative”. Almost 80% of news from Heisingen can be termed positive or neutral in nature, followed by 70% from Stadtkern and 40% from Altendorf. This difference in the nature of news reporting is likely to have a deep impact upon the images of these areas, as the areas with higher percentage of positive news are more likely to be perceived positively than those with lower percentage of them and vice versa. However, this may not completely correlate with the ground reality as the findings of figure 5-35 are in contract with the earlier findings of this chapter where all three CSAs are found to have many positive features as well (see figure 5-16, 5-19, 5-25 etc.). Final findings of

this chapter also indicate that despite their very different coverage in print media, all three CSAs demonstrate certain similarity and positivity.

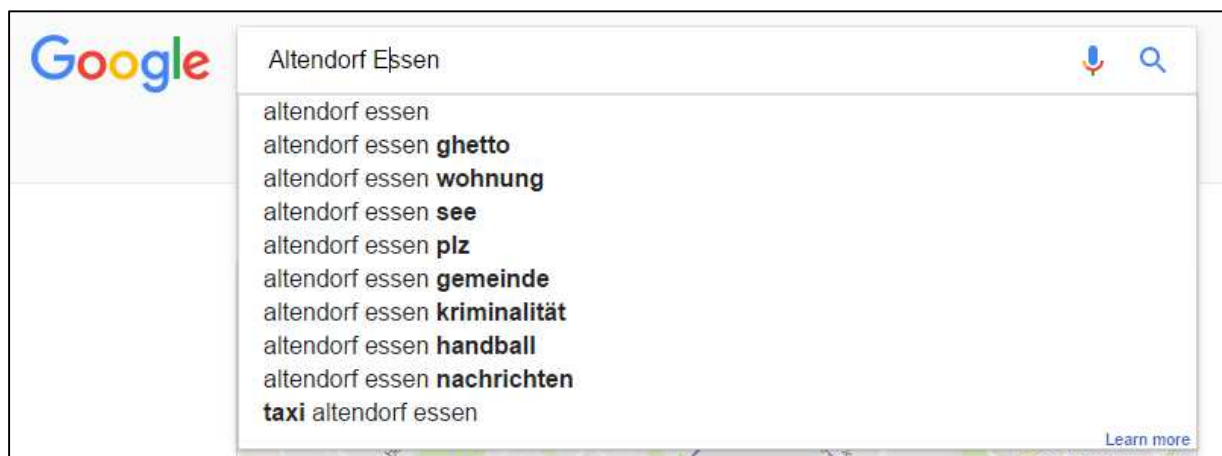
5.5.3 Google autocomplete trends

The advancement of internet and social media has allowed a more specific and intimate insight into the thinking of individuals than it had been possible some years ago. Some of the notable platforms that allow a closer look at aggregated yet anonymised data are Google, Facebook and Twitter. Google search predicts what it calls “auto complete”, which is based on the trends that users having certain commonality (such as topic, geography, group etc.) derive. It is based upon the queries users feed into google search engine. Google (Google, 2017) states that:

“Search predictions are generated by an algorithm without human involvement. The algorithm is:

- Based on objective factors, including how often others have searched for a word.
- Designed to reflect the range of info on the web. Because of this range, the search terms you see might sometimes seem strange or surprising.”

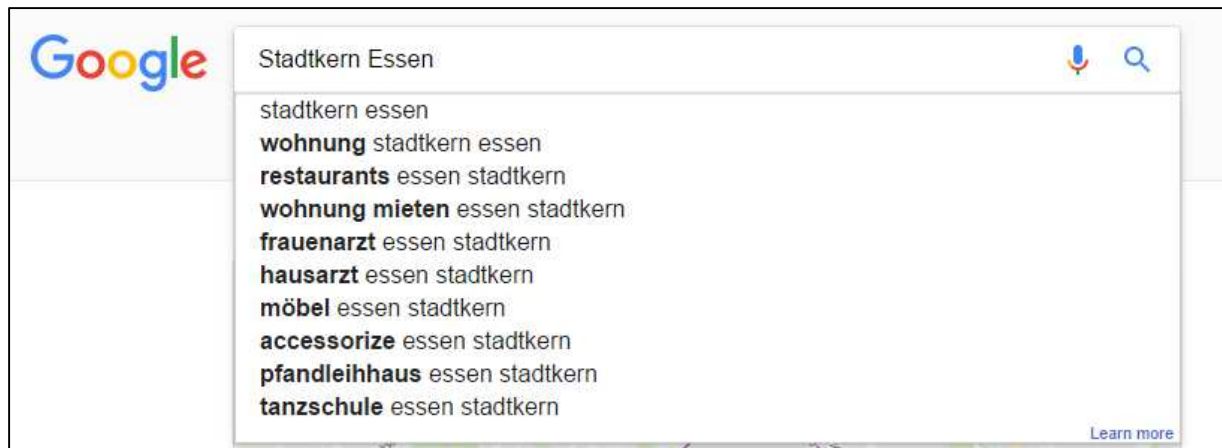
Figure 5-36: Google autocomplete predictions for Altendorf



Source: - screenshot from www.google.de accessed on 01.03.2017

This provides a unique window into what people are generally searching on the internet related to a specific topic or area. This section highlights the google autocomplete trends for the three CSAs and delves deeper into how this may add to the image of these areas. Figures 5-36, 5-37 and 5-38 show the screenshot of google autocomplete predictions for Altendorf, Stadtkern and Heisingen respectively.

Figure 5-37: Google autocomplete predictions for Stadtkern



Source: - screenshot from www.google.de accessed on 01.03.2017

The top 10 predictions as made by google autocomplete consist of various words that are often searched in relation to the given area. From figure 5-36, 5-37 and 5-38, all words that are predicted by google autocomplete for Altendorf, Stadtkern and Heisingen are categorised into the two categories “positive and neutral” and “negative” in table 5-10.

Figure 5-38: Google autocomplete predictions for Heisingen



Source: - screenshot from www.google.de accessed on 01.03.2017

Table 5-10 renders a similar (to the coverage in WAZ) yet more positive image of all three CSAs. Though the number of words predicted by google autocomplete is merely 9, these are 9 most searched words related to that area based on the trends for a specific time-period. This provides a closer insight into what people in the digital world (in google search engine) either tend to associate these areas with or what they would like to find there. For two neighbourhoods,

Stadtkern and Heisingen, all nine words can be termed as either positive or neutral, though what these words mean differs in these two areas. Most of the words searched in Stadtkern are related to everyday life needs (basic survival needs as defined by Maslow's hierarchy of needs, see section 2.2.2) such as house, real estate, doctors and shopping while most of the words searched for Heisingen are related to higher level of needs (as defined by Maslow's hierarchy of needs, see section 2.2.2) such as sports, leisure and entertainment. This indicates to the possible adequacy of the standard of living in Heisingen where ambience is now moving toward a higher quality of life than in Stadtkern.

Table 5-10: Google autocomplete word types

CSA	Positive and Neutral	Count	Negative	Count
Altendorf	<i>Wohnung</i> (house), <i>See</i> (lake), <i>PLZ</i> (Postal Code), <i>Gemeinde</i> (community), <i>Handball</i> , <i>Nachrichten</i> (news), <i>Taxi</i>	07	<i>Ghetto</i> (slum), <i>Kriminalität</i> (crime)	02
Stadtkern	<i>Wohnung</i> (house), <i>Restaurants</i> , <i>Wohnung meiten</i> (house rentals), <i>Frauenarzt</i> (gynaecologist), <i>Hausarzt</i> (local doctor), <i>Möbel</i> (furniture), <i>Accessorize</i> , <i>Pfandleihhaus</i> (pawn shops), <i>Tanzschule</i> (dance school)	09		00
Heisingen	<i>Baldeneysee</i> (a famous lake), <i>Haus Heisingen</i> (A listed medieval heritage mansion in Heisingen), <i>SG Heisingen</i> (sports team), <i>MS Heisingen</i> (sports team), <i>TC Heisingen</i> (sports team), <i>Immobilien</i> (Real Estate), <i>Sparkasse öffnungszeiten</i> (a local bank work hours), <i>Georgschule</i> (a local school), <i>Sparkasse</i> (a local bank)	09		00
Source: - by Author				

Altendorf presents a slightly different picture where two out of nine words can be clearly termed as negative while the rest falls into positive or neutral category. Similar to the image forming from the news reports analysis in the previous section, crime and poor living conditions in Altendorf feature among the google autocomplete predictions as well. The positive and neutral words can

be classified as primarily related to basic survival needs (as defined by Maslow's hierarchy of needs, see section 2.2.2). It can be concluded that Heisingen has most positive online image among the three CSAs, followed by Stadtkern and Altendorf.

5.6 Outlook

Running since 1974, Eurobarometer is the public opinion gathering platform of the European Commission which aims to monitor public opinion in the member states (Commission, 2017). Each survey consists of about 1000 face to face interviews per country. Additionally, depending upon the needs of a specific member country, subject specific flash telephonic surveys are carried out as well. This provides one of the largest and longest time line data source that can be used to understand how the public opinion on various topics has changed over time. This research uses the data set publicly available from Eurobarometer to understand and analyse some of the questions that are related to the outlook aspect of identity of Essen. Data is usually collected at the district/city/municipal level depending upon the country. In case of Germany, data collection is done by dividing the nation into seven data collection zones (namely Berlin, Dortmund, Essen, Rostock, Hamburg, Leipzig and Munich). Essen is marked as one of such zones, though the data collected under this head need not be confined to the administrative boundary of Essen only, but is likely to cover areas around Essen as well. For the survey conducted in year 2014, a total of 41645 samples pertaining to various studies from across Europe were collected, out of which 3512 were from Germany, with 502 samples collected in the Essen zone.

The following 19 questions asked in the Eurobarometer survey have been selected for this research and analysed further. These questions are broadly split into three categories to allow a more cohesive comparison (table 5-11). The first grouping deals with the level of satisfaction with physical infrastructure and related aspects. These are the factors that determine the standard of living of a place and relate to the housing and work life balance topic of BLI (see figure 2-5) and the usage element of urban identity (see section 3.3.2). The second set of questions deal with perceptions related to more intangible aspects of living in a place including interpersonal trust, perception of safety and relationships with foreigners. These questions relate more to the higher levels of needs as defined by Maslow's hierarchy of needs, (see section 2.2.2) as well as to the community and civic engagement topics of BLI (Better Life Index, see section 3.3.2). The last group containing three questions aims at measuring the level of flourishing in an individual's life (as defined by Martin Seligman, see section 2.4) which also relate to the topics of safety, income and life satisfaction topics of BLI (see section 3.3.2). All together these questions are aimed at understanding the broader public opinion and perception on parameters that cover various levels

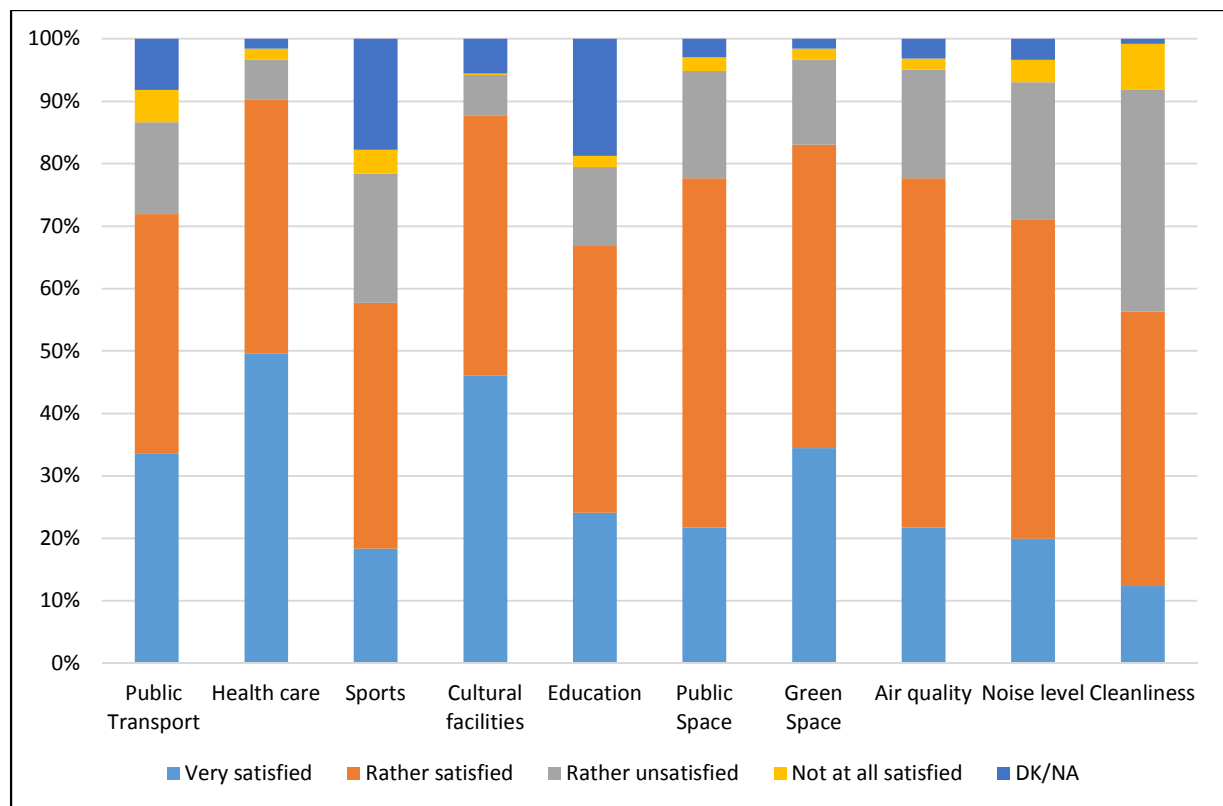
of their wellbeing and identity. This can provide a parallel view of these parameters and can support the findings of this research or highlight the differences among them.

Table 5-11: Questions from Eurobarometer survey 2014

Category of question	Questions
Standard of Living	1. Level of satisfaction in general with <ul style="list-style-type: none"> I. Public transport II. Health care, services, doctors and hospitals III. Sports facilities such as sports fields and indoor sports halls IV. Schools and other educational facilities V. Public spaces such as markets, squares, pedestrian areas VI. Green spaces such as parks and gardens VII. The air quality VIII. The noise level IX. Level of cleanliness
Higher levels of needs	2. Perception regarding <ul style="list-style-type: none"> I. Feeling safe in the city where they live II. Satisfaction with the city where they live III. Presence of foreigners being good IV. Level of integration of the foreigners who live there V. Trusting most of the people from the city where they live VI. Trusting most of the people from their neighbourhoods VII. Trust in the public administration
Flourishment	3. Level of satisfaction with <ul style="list-style-type: none"> I. The financial situation of the household II. Life in general III. Place where they live
Source: - By Author based on the data from Standard Eurobarometer 82 (conducted in November, 2014)	

The answers to these questions are separately analysed for each category. Figure 5-39 shows the comparative results for the nine questions belonging to the first group, the standard of living. These questions are analysed together to allow a relative understanding of them.

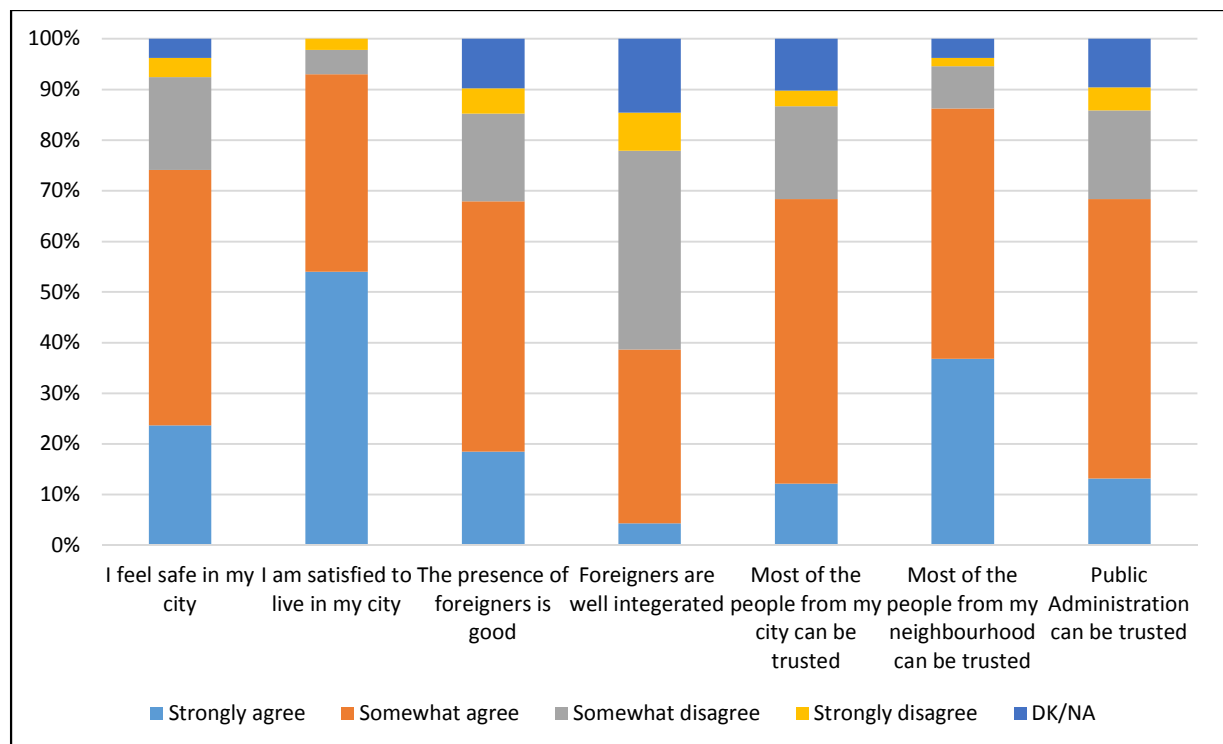
Figure 5-39: Eurobarometer standard of living responses



Source: - By Author based on the data from Standard Eurobarometer 82 (conducted in November, 2014), primary Y axis shows the % of respondents

Except the two parameters, “sports facilities” and “level of cleanliness”, more than two thirds of respondents have expressed some level of satisfaction with every parameter. Health care and cultural facilities have gained highest satisfaction among the respondents while public transport seems to be satisfactory to only 70% of the respondents. Education facilities are another area of concern as only two third of the respondents find them to be satisfactory. The overall situation of these parameters presents the image of a region with moderately satisfied residents, however, many of the parameters show the scope for improvement. Public transport, cleanliness, air quality and noise level are the four parameters getting majority of dissatisfaction responses. This could be partly due to the perception generating from industrial legacy of the Ruhr area well as due to the challenging financial health of many city governments from this region. Many cities have not been able to complete the transformation from their industrial past into more modern economic activities. The high level of unemployment also affects cities’ ability to serve its citizen. The higher satisfaction with the basic needs paves the transition into meeting the higher needs of residents; to enhance the wellbeing of residents cities need to provide equal and decent quality of life to all.

Figure 5-40: Eurobarometer higher level needs responses

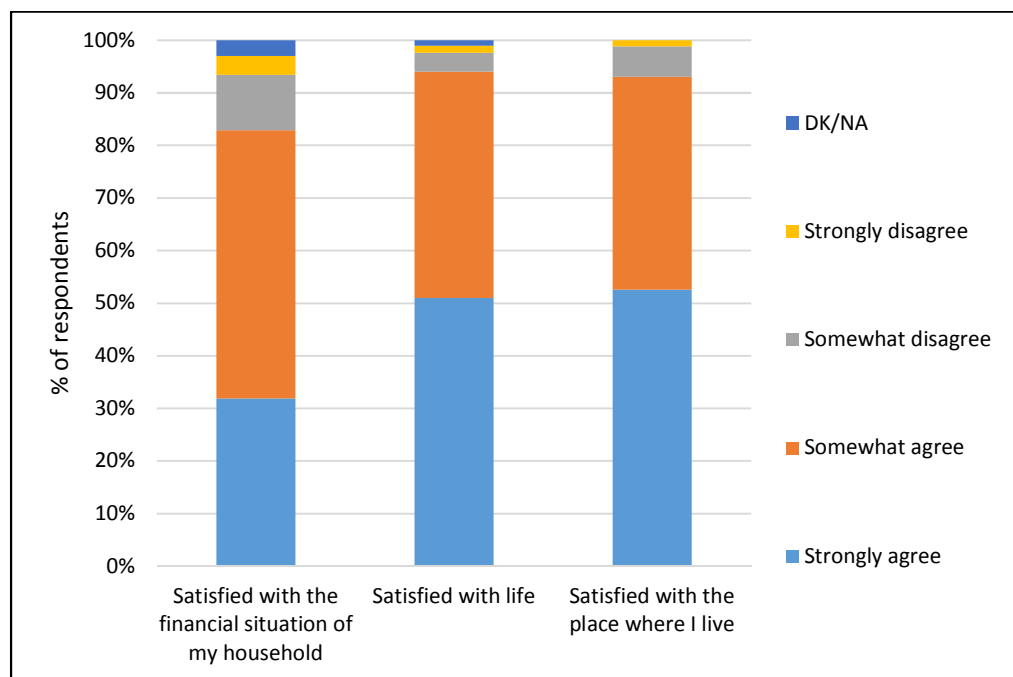


Source: - By Author based on the data from Standard Eurobarometer 82 (conducted in November, 2014), Primary Y axis shows the % of respondents

Figure 5-40, shows the responses to the questions falling into the higher-level needs category. The issue of integrating foreigners seems to be very crucial among the respondents, with majority of them stressing the fact that they are not well integrated into the society they live in. This finds reflection from the earlier findings in this chapter from Altendorf and Stadtkern that have relatively very high concentration of foreigners and dual nationals (figure 5-28). The presence of foreigners in general seems to cause some concern with more than 20% of respondents disagreeing from it being a good or positive thing. This needs immediate action as the demographic trends indicate to a more diverse demographic profile of Essen in future and a society with high interpersonal trust fosters a healthier and peaceful living environment for all and vice versa (Helliwell & Wang, 2011) . A general sense of alienation or lack of the sense of belongingness can prevail among the minority as well as the majority resident groups if this cultural and ethnic divided is not bridged. There is a trust deficit with the public administration as well as only two third of the respondents either fully or partially trust them. This indicates to the lack of communication as well as limited opportunities for participation in the urban governance and daily city activities for significant percentage of population. This calls for enhanced participation and establishing clearer

communication channels with the citizens so that they have a higher sense of belonging as well as ownership; which in turn can improve the functioning of Stadt Essen and enhance the sense of wellbeing of its residents. Despite all this, people are emphatically satisfied to live where they live and have a high level of trust in their neighbours. This underlines the higher resilience among the residents. The overall image of the higher-level needs from these responses could be termed as moderate as well.

Figure 5-41: Eurobarometer flourishing needs responses



Source: - By Author based on the data from Standard Eurobarometer 82 (conducted in November, 2014)

Figure 5-41 shows three very important questions that relate to the flourishing needs. Despite moderate levels of satisfaction with the standard of living needs and higher level needs, people seem to have a very high level of satisfaction with their lives as well as the places where they live. People also report a relatively higher satisfaction with their financial situation. It can be argued that the flourishing needs of the respondents project a positive picture of survey area (Essen and around). This again highlights the resilient nature of the residents of this area who have witnessed cities here changing rapidly over time. This constant reminder of changes may have helped residents in preparing or at least accepting the state of affairs and is reflected in their overall very high satisfaction with life. However, many residents would prefer to have better financial safety.

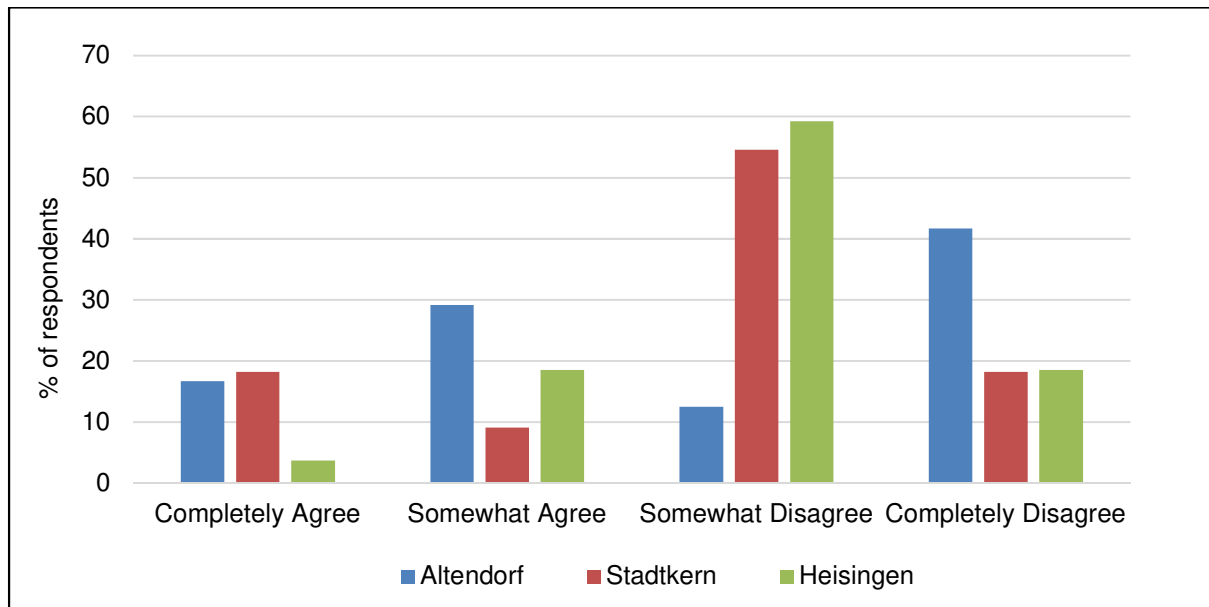
As the results presented above are based on a survey that was conducted at a far bigger geographical scale than the CSAs, it does not specifically highlight the situation in these neighbourhoods. Certain questions from the 2012 KWI survey are analysed below to provide a complementary understanding. Figure 5-42 shows the self-reported life enjoyment by the respondents from three CSAs. In Altendorf, 17% of respondents emphatically agree to the fact that they are enjoying their life to the fullest while 29% reported partial agreement to it. A similar picture emerges from Stadtkern as well where 18% emphatically report enjoying their life to the fullest, however, only 9% report partial agreement to it. On the contrary, only 4% of respondents from Heisingen report emphatical enjoyment of life to the fullest but 19% partially agree to it. There is a much larger concentration of respondents in both Stadtkern and Heisingen who do not agree, though more than 40% of respondents from Altendorf completely disagree as well. To sum up, respondents from Altendorf are more scattered towards the extremes whereas in the two other areas the distribution is less extreme with higher percentages of those who do not enjoy their life to the fullest, with Heisingen reporting a higher percentage of such people than Stadtkern.

This can be correlated with the findings of figure 5-16 and 5-29 which also demonstrate similar trends and can provide explanation to figure 5-42 as well. The different demographic profile of the three CSAs, along with their diverse cultural, socio-economic and ethnic backgrounds can lead them into accessing their lives differently. However, these findings can also be related to the overall quality of life in these areas. The findings of figure 5-42 indicate to the higher level of resilience of the residents of Altendorf than those from Stadtkern and Heisingen.

Figure 5-43 shows the self-reported liking for a vibrant life (termed happening in the questionnaire). Respondents from Altendorf reported most positively, with one fourth of them completely agreeing to it and more than 45% agreeing partially to it. Stadtkern presents a different picture as more than two third of the respondents either completely or partially disagree from it. More than half of the respondents from Heisingen report either complete or partial agreement to likening for life when it is vibrant while close to 40% of them either completely or partially disagree to it. On this basis of findings of figure 5-41 and 5-42, it can be argued that the residents from Altendorf have higher level of resilience while the residents of Stadtkern have lowest of it. This could be attributed again to their diverse backgrounds and profiles. As resilience (along with satisfaction with life and vibrant life perception) is directly related to the sense of wellbeing (Mguni, Bacon, & Brown, 2012, p. 3), this indicates to the higher level of wellbeing in Altendorf, followed by Heisingen and then by Stadtkern. This also calls for the provision of the strengthening of

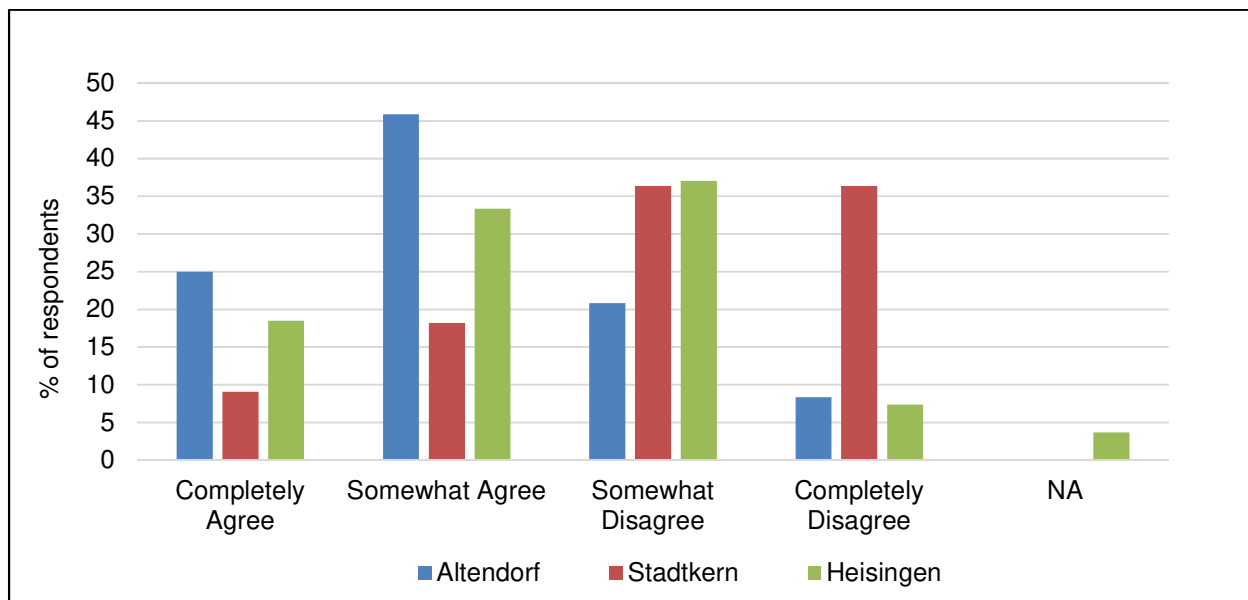
community as well as administrative support systems for the residents from Stadtkern and Heisingen.

Figure 5-42: Self-report life enjoyment of life



Source: - KWI Survey, 2012

Figure 5-43: Self-reported likening for life when it's vibrant



Source: - KWI Survey, 2012

5.7 Analysis Matrix

In the previous sections, various parameters, which directly and indirectly relate to the notion of urban identity as explained in Chapter 3 are empirically analysed. In this section a cumulative analysis of all these parameters is done to arrive at the comprehensive understanding of how the three CSAs are doing w.r.t. each other. The notion of urban identity is relative and subjective; it can be understood in comparative terms. Table 5-12 summarises all the parameters covered in this chapter and presents a cumulative urban identity matrix for the three CSAs.

Table 5-12: Urban identity matrix

Variable/Attribute	Altendorf	Stadtkern	Heisingen
Predominant land use	Residential with mixed use along major arteries	Mixed use	Residential
Land value (residential)	Low	Moderate	Moderate
Living Space per person	Low	Moderate	High
Work-home relationship	More than 40% people work >10 kms away from the place of residence	Most of the people work within 5 kms from the place of residence	More than 40% people work >10 kms away from the place of residence
Population density	Very high	Higher than Essen avg.	Lower than Essen avg.
Working age population	High	Very high	Low
Rooms per Dwelling Unit (DU)	More than half DU have 3 or less rooms	Two third of DU have 3 or less rooms	More than 70% of DU have 4 or more rooms
Dual and non-Germany born residents	39.4%	54.5%	6.4%

Monthly income	Majority earn <€2500 PM	Distributed across all income brackets	Majority earn >€1500 PM with more than 30% earning >€2500
High standard of living (self-assessment)	Emphatically agree	Neutral	Disagree
Unemployment	High	High	Very Low
% of people of social support	Very high	Very High	Very low
Avenues of association – Weekly markets	Yes	Yes	No
Sport Clubs	Moderate	Few	Many
Voting turnout	Low	Low	Very High
Visiting art galleries and exhibitions	Often	Often	Seldom
Leisure activities	Very high	Low	Very high
Connectivity	High	Very high	Moderate
Access to PT	High	Very high	Moderate
Car ownership	Low	Very low	Very high
Attitude to PT	Mixed	Mixed	Negative
Attractions for non-residents	Low	Very High	Very high
Historic trends	Neutral	Neutral	Neutral
Coverage in print media	Negative	Mixed	Positive
Google autocomplete trends	Negative	Mixed	Positive
Enjoying life to the fullest	Somewhat positive	Mixed	Negative
Enthusiasm	High	Low	Mixed
Source: - By author			

To quantify these otherwise qualitative measurements, a linear evaluation scoring scale (table 5-13) is applied to the previous table. Assigned scores vary between -2 to +2 where -2 stands for very negative (adverse) impact on the desired state/parameter, +2 stands for very positive impact on the desired state/parameter and 0 stands for no/neutral nature of impact.

Table 5-13: Evaluation scoring scale

Score	
Very Positive	2
Positive	1
Neutral	0
Negative	-1
Very Negative	-2
Source: - By author	

In this scoring matrix, the evaluation of all 27 parameters for any CSA can yield a highest possible score of +54 if all the parameters are ranked very positive and a lowest possible score of -54 if all the parameters are ranked very negative. However, in real life scenarios, most often not all the parameters have either very positive or very negative impact. Table 5-14 shows the evaluated urban identity matrix created using the evaluation scoring scale from table 5-13.

Table 5-14: Evaluated urban identity matrix

No.	Variable/Attribute	Altendorf	Score	Stadtkern	Score	Heisingen	Score
1	Predominant land use	Residential with mixed use along major arteries	1	Mixed use	1	Residential	0
2	Land value (residential)	Low	1	Moderate	0	Moderate	0
3	Living Space per person	Low	-1	Moderate	0	High	1
4	Work-home relationship	More than 40% people work >10 kms away from the place of residence	-2	Most of the people work within 5 kms from the place of residence	0	More than 40% people work >10 kms away from the place of residence	-2
5	Population density	Very high	-2	Higher than Essen average	-1	Lower than Essen average	1
6	Working age population	High	1	Very high	2	Low	-1
7	Rooms per DU	More than half DU have 3 or less rooms	0	Two third of DU have 3 or less rooms	-1	More than 70% of DU have 4 or more rooms	1
8	Dual and non-Germany born residents	39.40%	-1	54.50%	-1	6.40%	0
9	Monthly income	Majority earn <€2500 PM	-1	Distributed across all income brackets	0	Majority earn >€1500 PM with more than 30% earning >€2500	1
10	High standard of living (self-assessment)	Emphatically agree	2	Neutral	0	Disagree	-1
11	Unemployment	High	-1	High	-1	Very Low	2
12	% of people of social support	Very high	-2	Very High	-2	Very low	2
13	Avenues of association – Weekly markets	Yes	1	Yes	1	No	-1

14	Sport clubs	Moderate	1	Few	0	Many	2
15	Voting turnout	Low	-1	Low	-1	High	1
16	Visiting art galleries and exhibitions	Often	1	Often	1	Seldom	-1
17	Leisure activities	Very high	2	Low	-1	Very high	2
18	Connectivity	High	1	Very high	2	Moderate	0
19	Access to PT	High	1	Very high	2	Moderate	0
20	Car ownership	Low	1	Very low	2	Very high	-2
21	Attitude to PT	Mixed	0	Mixed	0	Negative	-1
22	Attractions for non-residents	Low	0	Very High	2	High	1
23	Historic trends	Neutral	0	Neutral	0	Neutral	0
24	Coverage in print media	Negative	-1	Mixed	0	Positive	1
25	Google autocomplete trends	Negative	-1	Mixed	0	Positive	1
26	Enjoying life to the fullest	Somewhat positive	1	Mixed	0	Negative	-1
27	Vibrant life	High	1	Low	-1	Mixed	0
		Total	2		4		6

Source: - By author

The final score for Altendorf, Stadtkern and Heisingen is +02, +04 and +06 respectively. None of the neighbourhood scores very positively as the highest score of +06 is relatively smaller value for the evaluation of 27 parameters (the highest possible value is +54 while the lowest possible value is -54). This indicates that parameters are almost evenly scattered between positive and negative with positive scoring parameters being slightly more than the negative scoring ones. This difference is very small in case of Altendorf which explains its overall score of +02. Stadtkern scores +04 which indicates that number of positive scoring parameters is only somewhat higher than the negative scoring parameters. Heisingen scores highest in this matrix at +06. Table 5-14 has been evaluated with assigning equal weights to all the parameters.

This means that on basis of the measurement all the 27 parameters and assigning them equal weightage, all three CSAs have positive urban identity with Heisingen having the strongest identity among all three. However, the highest ranking of +06 and minimum ranking of +02 (on a scale with making possible scoring of +54), indicates that there are several parameters which need immediate attention and a planned approach to address them can further strengthen the identity of all three CSAs. Among them, Altendorf as it has the least positive urban identity, needs most attention. However, different parameters are differently valued as per their context. In order to assign weights to different parameters, the relative order of preference for these needs to be assigned. The Better Life Index (BLI) created by the OECD (see section 2.3.1) provides the order of preferences for various topics/parameters as an aggregate of choices made by the respondents from that specific country. The order of preference of parameters (along with the assigned weights) pertaining to a specific topic of BLI for Germany as listed by the OECD is shown in table 5-15. Every topic in table 5-15 has a different background colour for highlighting parameters (from table 5-16) that belong to that specific topic.

Table 5-15: Order of preference of topics of wellbeing for Germany

Preference	topic	Extra Weightage	Multiplication factor/weight
1	Life Satisfaction	100%	2.0
2	Health	90%	1.9
3	Education	80%	1.8
4	Work-life balance	70%	1.7
5	Environment	60%	1.6
6	Safety	50%	1.5
7	Housing	40%	1.4
8	Jobs	30%	1.3
9	Income	20%	1.2
10	Community	10%	1.1
11	Civic Engagement	0%	1.0
Source: - By author based on the Better Life Index website, see section 2.3.1			

Extra weightage has been assigned considering the preferences from BLI. An extra weightage of 0% means that the value for the parameter remains the same, while the extra weightage of 100% means that the value doubles. All the parameters discussed in table 5-14 can be attributed to one of the topics covered by the BLI and hence can be assigned a weightage.

Table 5-16: Weighted urban identity matrix

No.	Variable/Attribute	Weight	Altendorf	Score	WS	Stadtkern	Score	WS	Heisingen	Score	WS
1	High standard of living (self-assessment)	2.0	Emphatically agree	2	4.0	Neutral	0	0.0	Disagree	-1	-2.00
2	Enjoying life to the fullest	2.0	Somewhat positive	1	2.0	Mixed	0	0.0	Negative	-1	-2.00
3	Vibrant life	2.0	High	1	2.0	Low	-1	-2.0	Mixed	0	0.00
4	Sport clubs	1.9	Moderate	1	1.9	Few	0	0.0	Many	2	3.80
5	Work-home relationship	1.7	More than 40% people work >10 kms away from the place of residence	-2	-3.4	Most of the people work within 5 kms from the place of residence	0	0.0	More than 40% people work >10 kms away from the place of residence	-2	-3.40
6	Leisure activities	1.7	Very high	2	3.4	Low	-1	-1.7	Very high	2	3.40
7	Connectivity	1.7	High	1	1.7	Very high	2	3.4	Moderate	0	0.00
8	Access to PT	1.7	High	1	1.7	Very high	2	3.4	Moderate	0	0.00
9	Car ownership	1.6	Low	1	1.6	Very low	2	3.2	Very high	-2	-3.20
10	Attitude to PT	1.6	Mixed	0	0.0	Mixed	0	0.0	Negative	-1	-1.60
11	Predominant land use	1.4	Residential with mixed use along major arteries	1	1.4	Mixed use	1	1.4	Residential	0	0.00
12	Land value (residential)	1.4	Low	1	1.4	Moderate	0	0.0	Moderate	0	0.00
13	Living Space per person	1.4	Low	-1	-1.4	Moderate	0	0.0	High	1	1.40
14	Population density	1.4	Very high	-2	-2.8	Higher than Essen avg.	-1	-1.4	Lower than Essen avg	1	1.40
15	Rooms per DU	1.4	More than half DU have 3 or less rooms	0	0.0	Two third of DU have 3 or less rooms	-1	-1.4	More than 70% of DU have 4 or more rooms	1	1.40
16	Unemployment	1.3	High	-1	-1.3	High	-1	-1.3	Very Low	2	2.60

17	% of people of social support	1.3	Very high	-2	-2.6	Very High	-2	-2.6	Very low	2	2.60
18	Monthly income	1.2	Majority earn <€2500 PM	-1	-1.2	Distributed across all income brackets	0	0.0	Majority earn >€1500 PM with more than 30% earning >€2500	1	1.20
19	Working age population	1.1	High	1	1.1	Very high	2	2.2	Low	-1	-1.10
20	Dual and non-Germany born residents	1.1	39.40%	-1	-1.1	54.50%	-1	-1.1	6.40%	0	0.00
21	Avenues of association – Weekly markets	1.0	Yes	1	1.0	Yes	1	1.0	No	-1	-1.00
22	Visiting art galleries and exhibitions	1.1	Often	1	1.1	Often	1	1.1	Seldom	-1	-1.10
23	Attractions for non-residents	1.1	Low	0	0.0	Very High	2	2.2	High	1	1.10
24	Historic trends	1.1	Neutral	0	0.0	Neutral	0	0.0	Neutral	0	0.00
25	Coverage in print media	1.1	Negative	-1	-1.1	Mixed	0	0.0	Positive	1	1.10
26	Google autocomplete trends	1.1	Negative	-1	-1.1	Mixed	0	0.0	Positive	1	1.10
27	Voting turnout	1.1	Low	-1	-1.1	Low	-1	-1.1	High	1	1.10
			Total	2	7.4		4	5.5		6	6.6

Source: By author

Table 5-16 shows the detailed scoring for each parameter, which is calculated using the multiplication factors as per the extra weightage for each parameter (calculated by clubbing parameters under the topics related to the BLI). In this matrix, Altendorf scores highest at +7.4, Heisingen follows in the second place at +6.6 and Stadtkern comes third at +5.5. This standing of CSAs is very different from their standing as per the findings of table 5-14. The scores for various parameters from table 5-16 are further clubbed under their corresponding BLI topic in table 5-17.

Table 5-17: Ranking of CSAs as per BLI

Topic	Altendorf	Stadtkern	Heisingen
Life Satisfaction	8	-2	-4
Health	1.9	0	3.8
Education	N/A	N/A	N/A
Work-life balance	3.4	5.1	0
Environment	1.6	3.2	-4.8
Safety	N/A	N/A	N/A
Housing	-1.4	-1.4	4.2
Jobs	-3.9	-3.9	5.2
Income	-1.2	0	1.2
Community	0	5.5	0
Civic Engagement	-1	-1	1
Total Score	7.4	5.5	6.6
Source: - By author based on the Better Life Index, see section 2.3.1			

It is important to read the findings of table 5-14, 5-16 and 5-17 together. Heisingen scores highest on the equally weighted urban identity matrix, followed by Stadtkern and then Altendorf. Though the highest obtained score is not very high (+06 for Heisingen), the gap between best performing Heisingen and worst performing Altendorf is significant (04 points). In the weighted matrix (table 5-16) Altendorf scores highest, followed by Heisingen and Stadtkern comes at the third place. The gap between highest obtained score and lowest obtained score is 1.9 points. This brings the CSAs closer in terms of their urban identity. All three CSAs have final positive score which can be interpreted as the dominance of positive factors in all three areas. These scores are relative and a higher score need not necessarily mean that it is better than a lower score, it only indicates that certain aspects/topics which are preferred as per the BLI are more prevalent in the neighbourhood scoring higher than the one scoring lower.

The understanding of the urban identity of the CSAs changes as the weightage changes. This indicates that by changing what we want to achieve and what we strive for, same neighbourhood can be seen either positively performing or lagging behind. This highlights the importance of narrative and how by focusing on the larger comprehensive picture of what urban neighbourhoods need, a different understanding and (relative) standing of the neighbourhoods can be obtained. Areas which are generally seen negatively, can also have various positive attributes while areas which are generally seen very positively, might be hiding certain layers of deficiencies. It should be noted that the weightage assigned using the Better Life Index ranking of topics for Germany, need not necessarily mean that topics ranked lower are the ones that are valued less or are not

needed but these needs are most likely to be already sufficiently addressed or at least the respondents have a higher access to these topics than those ranked higher. This ranking is more likely to represent either higher demand or relative deficit of certain topics (which are ranked higher) than those which are ranked lower.

Table 5-17 highlights where a specific CSA is performing better and worse w.r.t. other two CSAs. Altendorf, which is scores highest in BLI weighted matrix (table 5-16), scores significantly higher on life satisfaction +08 than Stadtkern -02 and Heisingen -04. This difference is very significant and calls for immediately addressing parameters related to the satisfaction with life. The demographic difference between the three CSAs might influence how people access and report their satisfaction with life. Altendorf has a significant proportion of dual nationals who are often the second-generation immigrant German nationals. Their higher assessment of satisfaction with life indicates that they have succeeded in incorporating the best of Germany with the life perspective that family members might have brought from their lands of origin.

Health is one area where Stadtkern needs to focus immediately, especially in terms of access to quality open spaces and sports facilities. The residents of Heisingen lack a good work life balance and this gets reflected in the findings of this research as well. Heisingen also needs to immediately address the environment issues, mostly related the access to public transport, attitude toward it and reducing the private motorized vehicular trips. However, it performs splendidly on the topics of Housing and Jobs, where other two CSAs perform very poor. The dense neighbourhoods of Altendorf and Stadtkern need to provide better housing, both qualitatively and quantitatively. Both Altendorf and Heisingen perform poor on the topic of community and civic engagement, while Stadtkern scores significantly high on the topic of community. This is primarily due to higher working age group population and being city centre, which works a strong pull factor for non-residents. Heisingen despite having positive media image, performs poorly in terms of access to public spaces and the lower percentage of working age group among residents. This highlights the need to address the demographic profile of Heisingen and provide opportunity for young people to live there and have better access to public spaces.

The classification of parameters under various BLI topics in this research is based on the understanding of wellbeing and urban identity as discussed in chapter 2 and 3. Though by assigning different weightage, a different relative standing of CSAs can be presented; the findings of this chapter support the hypothesis of this research and highlight the areas of interventions for the CSAs. By clearly stating the area of immediate focus, this can assist in policy formulation and budget prioritisation for the city of Essen.

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Chapter 6 The way forward – Conclusion and Recommendations

This research is aimed at assisting various stakeholders involved in the urban issues in understanding the notion of wellbeing and urban identity from urban planning perspective and then assisting them in connecting them (wellbeing and urban identity) to the narrative and needs of the 21st century cities. It is also aimed at assisting the decision makers in the selecting and then prioritizing policies from the wellbeing and urban identity perspectives. This concluding chapter summarizes the findings from all previous chapters and provides broader policy level recommendations based on their understanding as well as the empirical analysis of the case study areas. These recommendations are also based on the various policy formulation guidelines from the UN-Habitat, GIZ (*Deutsche Gesellschaft für Internationale Zusammenarbeit*), OECD as well as the pioneer work such as Cities for People.

6.1 Conclusions from pervious chapters

This section presents the major conclusions from all previous chapters which are then concluded to develop the comprehensive understanding of the various fundamental concepts of this research and to provide policy recommendation and prioritization guidelines.

6.1.1 Wellbeing

This chapter provided the main theoretical framework for this research. Various authors have argued that it is difficult to provide an exhaustive definition of wellbeing; it is instead more practical and useful from the research perspective to describe wellbeing and its various constituents (Dodge, Daly, Huyton, & Sanders, 2012). The notion of wellbeing has been the central driving force of human endeavours, and philosophers and scientists alike have been trying to contextualize it to time and needs. Even if world has significantly changed during these years, the basic human needs have remained similar, and at a very meta level, they can be summed up as consisting of some basic factors, like those presented in the Maslow's hierarchy of needs (see section 2.2.2). Based on these assumptions, it can be assumed that despite the unknown nature of the future of cities, the wellbeing of the people living in those cities would be derived significantly by the same factors. However, the relative arrangement/ranking of these factors depends upon the regional and cultural context. The OECD Better Life Index (BLI) provides a glimpse into the impact that context has on these factors (OECD, 2015). It lists 11 topics of wellbeing but provides a very diverse picture of how these topics are ranked w.r.t. each other in different countries. This underlines the need to analyse and understand the context in which a particular case study is

located. These considerations define the way chapter 5 deals with the analysis of data and its interpretation.

Some prominent examples of the alternative measurement of human wellbeing has been discussed, including the concept of GNH (Gross National Happiness) from Bhutan. The common factors from these examples are further selected to describe what wellbeing means from the urban planning perspective. The New Urban Agenda published in 2016, helped in reviewing the basic assumptions of this research and provided a strong backing to the research itself as the importance of wellbeing of the residents is specifically underlined in it (Nations, 2016). As various attributes of wellbeing are being practiced in different forms, despite the comprehensive understanding of the notion of wellbeing being relatively new in the urban planning realm, an in-depth understanding of wellbeing can provide a common starting point and frame of reference to these concepts. Urban planning as practiced across the globe at present, addresses different levels along the wellbeing ladder, however, there is a growing urge in cities to provide higher quality of life in addition to providing satisfactory standard of living. Cities of the 21st century are likely to eventually focus on enhancing the wellbeing of their residents. This chapter concludes by highlighting some of the main attributes of wellbeing from the urban planning perspective including urban identity.

6.1.2 Urban Identity

The forces driving the urbanization in the neo-liberal world are global and very central in nature which has created many cities that are located thousands of miles away from each other but look the same (Greefield, 2016). The understanding of urban identity highlights the importance of the uniqueness of a place, not just aesthetically, but functionally and culturally as well. The role that culture plays in how we experience and use space, is very important. Like wellbeing, urban identity is complex, multi-layered and subjective in nature. However, people living in the same area are likely to acquire certain traits influenced by that area over time, as goes the saying “first we shape our buildings (cities), and then the buildings (cities) shape us” (Hartenberger, 2011). Understanding these traits from the urban planning perspective can assist in understanding the identity of that area.

The 2016 advisory report from the German Advisory Council on Global Change (WBGU) published at the German Habitat Forum, highlighted the importance of understanding and strengthening urban identity (*Eigenart*) which provided a strong backing to this second fundamental (theoretical) pillar of this research (WBGU, 2016). Researchers from different disciplines have tried to explain the identity of space or urban identity from their perspectives.

Many of these researches are mainly focused on the visual and aesthetic aspects of identity. This research delves more into the intangible aspects of identity namely, usage, association, history and outlook. These elements of urban identity are further divided into sub categories, which allowed measuring the urban identity of the CSAs as a cumulation of these sub categories. The importance of urban identity is underlined as it strengthens the sense of wellbeing of residents.

6.1.3 Global best practices

The four best practices discussed, highlight the need of a comprehensive approach to wellbeing in urban areas. Considering the complex and rather subjective nature of wellbeing, solutions/parameters have to be contextualised while implying the broader usages and implications for others to learn from and emulate. These examples underline the importance of an active and constructive public participation and how despite challenges, cities of wellbeing can be co-created when different actors work together towards the common objective, that is based on the locally defined understanding of wellbeing. The examples underline that flexible, participative and simple projects, which need not require massive investment or very sophisticated workforce, can significantly enhance the wellbeing of people. It can be argued that a combination of clearly designed policies, well prioritized budgetary spending, participation and urban innovation hold the key to the successful urban planning in the 21st century. The lesson from these examples are used in formulating policy recommendations in section 6.5.

6.1.4 Analysis

On the basis of the socio-economic profile of the three CSAs, it can be stated that these areas can be clubbed into two groups which are empirically different from each other. Altendorf and Stadtkern show a high level of similarity on majority of parameters analysed, whereas Heisingen is distinct from these two on most of the parameters. In Altendorf and Stadtkern, the population is young, predominantly male, has higher percentage of non-German nationals, lives in denser areas with lesser space per person and is poorer (also has a significantly higher percentage of people who are dependent upon some kind of social benefit). This has both positive and negative aspects and depending upon the public policy, the demographic dividend of these areas can become an either asset for Essen or turn into a troubled lot of unemployed people with ambiguous identity and sense of belongingness. Heisingen lies very much on the opposite end of these problems. It has a better gender balance, offers more space to its residents who have higher access to the open space, earn relatively more, are less dependent upon the social benefit; but they are older and the population under 18 years of age is relatively below the average for Essen.

Though the current situation in Heisingen can be stated as positive, the declining population is a major concern.

The voting pattern highlights two major concerns, the general lack of interest to vote in the elections in Altendorf and Stadtkern and the overall falling level of interest across the three CSAs to vote in local (mayors') election. If the lack of interest to vote in elections among the residents of Altendorf and Stadtkern is seen w.r.t. to the significantly high percentage of residents who are not born in these neighbourhoods and are non-German nationals, this may indicate to the likely sense of alienation among the residents from these areas resulting in lower participation in the democratic franchise. This calls for strengthening the institutions as well as raising the awareness which significantly enhance their overall sense of wellbeing (Frey & Stutzer, 2002).

Cultural factors can influence how people perceive their life which is evident from the assessment of life satisfaction in CSAs (see section 5.6). Though Heisingen *prima facie* looks as a better neighbourhood to live in, the reported lesser level of satisfaction with life and limited usage of public space (w.r.t. other two CSAs) underline the complex relationship between society, individual and the space (see figure 1-1, 5-20 and section 5.4.3). Cities are becoming increasingly heterogenous and people with different cultural upbringings and belief systems are living together. The new urban agenda argues that an enhanced interaction between different neighbourhoods in a city, can foster higher wellbeing and support the cultural amalgamation that these heterogenous cities form due to their diversity (Nations, 2016).

The importance of traditional media and increasingly the social media, in forming and strengthening certain image of space is evident in the three CSAs (see section 5.5.2 and 5.5.3). The rapid change in the ways we communicate, is impacting how we perceive and experience our cities as well. While people are getting more anonymous and lonely in their own neighbourhoods (Iparraguirre, 2016); (Gillies, 2016), the physical boundaries between space is becoming more fluid as more and more space of flow are being created (Castells, 1997). During the industrial revolution, the rural urban migration changed the way people formed relationships (Hall, 2014) and social media is changing that rapidly again (see section 5.5.3).

The urban identity matrix presents a relative understanding of wellbeing in the three CSAs. This understanding or rendering of wellbeing is from the urban identity perspective, which being a part of the comprehensive view of wellbeing in the CSAs, provides a perspective to understand it. The equally weighted urban identity matrix (see table 5-14), shows that Heisingen has the most positive urban identity among the three CSAs, followed by Stadtkern and then Altendorf. However,

none of the three CSAs has performed very positively which indicates to need to improvement in each of them. The weighted urban identity matrix (see table 5-16) however, presents a different understanding of the urban identity of the CSAs as Altendorf is found of have most positive urban identity, followed by Heisingen and then by Stadtkern. This also indicates to relatively lower difference between the scores of three CSAs than in the equally weighted urban identity matrix (see table 5-14). This further indicates that despite apparently looking so different from each other, the comprehensive urban identity of each of them has almost similar positive and negative traits. The rendering of wellbeing from others perspectives (such as safety and security or infrastructure) can be found to be, either similar or different from these findings, depending upon the context and paraments. These findings of chapter 5 should not be read as the final state of urban identity (and wellbeing) in the CSAs but rather as one of the significant perspectives on it; these perspective together form the comprehensive state of wellbeing for that area. Chapter 5 provides an enhanced understanding of the CSAs as well as the notion of wellbeing and highlights avenues and priorities that can be addressed to enhance the wellbeing in the CSAs and Essen.

6.2 Urban identity and wellbeing

Based on the analysis done in the previous chapter (see table 5-14), table 6-1 presents the relative measurement of the major elements that have a direct impact on the identity of these areas from the three CSAs. Altendorf scores high (in terms of absolute impact) only in social relationships while on every other element, it scores moderate or negative. Stadtkern scores high in some elements and low in others. Heisingen scores high in most of the elements and can be stated to have the most positive identity of the three areas while Altendorf and Stadtkern have mixed urban identities.

These scores are not indicators of the absolute ranking of these areas, but they demonstrate relative presence of certain elements and the absence of others. For a different area, different weightages can be assigned to these elements and each element can be differently ranked depending upon the scenarios from which they emerge (as presented in table 5-16). By assigning weightages as per the OECD Better Life Index, Altendorf is found have most positive urban identity, followed by Heisingen and then by Stadtkern (see table 5-17). The priorities of people from a certain context may be different from people from other context (see section 2.3.1.), which can be better addressed by making context specific policies (Programme U. N., 2013).

Table 6-1: Elements impacting urban identity

Elements	Type of impact	Altendorf	Stadtkern	Heisingen
Land/Flat Ownership	Positive	Moderate	Low	High
Place of birth	Positive	Moderate	Low	High
Social Relationships	Positive	High	High	Moderate
Quality of Life	Positive	Moderate	Moderate	High
Noise	Negative	High	High	Low
Landmarks	Positive	Low	High	Moderate
Duration of Stay	Positive but not very significant	Moderate	Low	High
History	Contextually positive or negative	Moderate	Moderate	Moderate
Aesthetics	Positive	Moderate	Moderate	High
Source: by Author based on table 3-3 (see section 3.2)				

This research explores urban identity as a complementary tool to enhance wellbeing of people living in urban areas. Urban identity is a subset of wellbeing, and factors affecting urban identity are likely to have impact on wellbeing as well. Based on the data collected and analysis of the three CSAs, it can be argued that the understanding of urban identity of these CSAs, can be used to understand the wellbeing in these areas as well, as many attributes that influence urban identity affect wellbeing as well. By addressing a specific attribute of urban identity in a given area, wellbeing of that area can be impacted as well. Urban identity is a constituent of wellbeing and any improvement in urban identity should improve wellbeing as well. Table 6-2 below highlights the interconnectedness of various aspects of urban identity and wellbeing and provides a relative measurement of these aspects for the three CSAs.

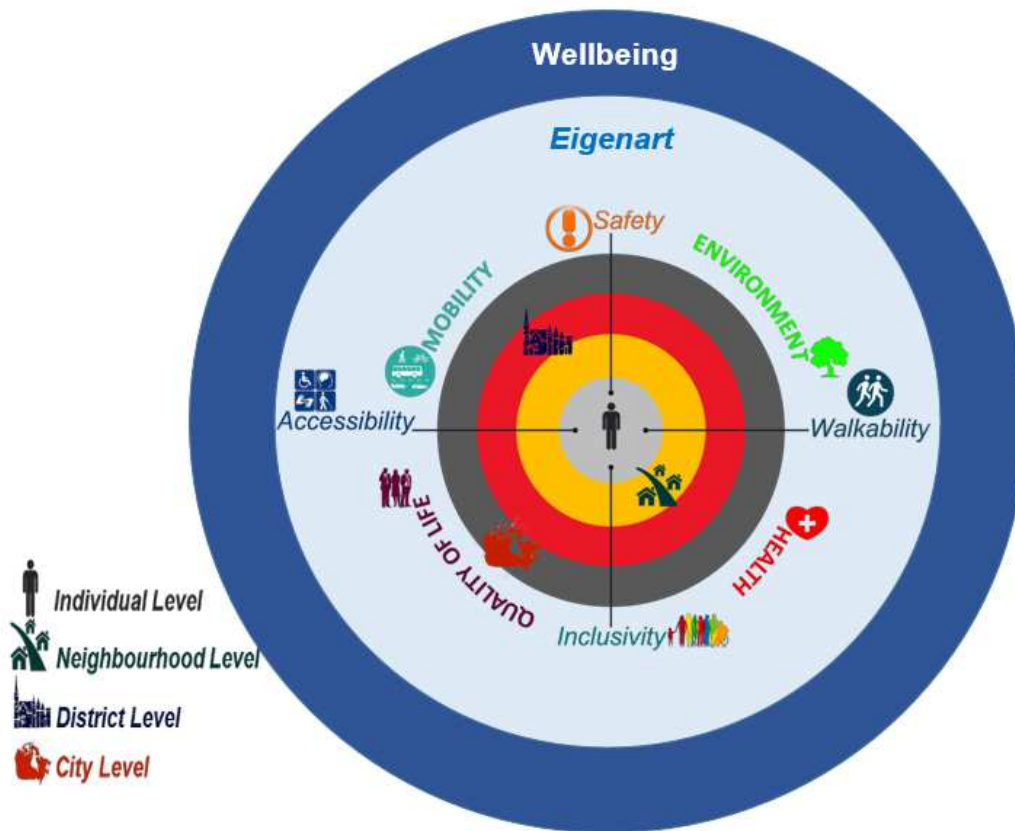
Table 6-2 provides the relative understanding of wellbeing in the three CSAs. This is different from table 6-1 which renders the CSAs from the perspective of urban identity only. It can be argued that Altendorf has the most positive sense of wellbeing among all CSAs as it has the maximum number of parameters with 'high' scores, followed by Heisingen and then Stadtkern. The differences between CSAs is subtle, however, it is important to note that even though the overall picture of wellbeing in three CSAs is similar to each other, different strategies are needed to enhance the sense of wellbeing for different CSAs due to difference in their demography, history, outlook and usage.

Table 6-2: Urban identity and wellbeing

Attribute	Major Aspects of Wellbeing related to it	Altendorf	Stadtkern	Heisingen
Participation and Engagement	Positive Emotion	High	High	Low
	Satisfaction with Life	High	Low	Low
	Association	Moderate	Moderate	Moderate
	Belongingness	Moderate	Low	High
Access	Quality of Life	Moderate	Moderate	High
	Positive Emotion	High	High	Moderate
	Meaning	High	High	Moderate
	Association	Moderate	Moderate	Moderate
	Work -Life Balance	Moderate	High	Low
Identity	Meaning	High	Moderate	High
	Belongingness	Moderate	Low	High
	Association	Moderate	Moderate	Moderate
	Satisfaction with Life	High	Low	Low
Safety (Financial, Social and Environmental)	Income	Low	Moderate	High
	Environment	Low	Moderate	Low
	Work-life Balance	Moderate	High	Low
	Physical wellbeing (safety)	Low	Moderate	High
Source: - By Author based on Chapter V				

Based on the theoretical understanding of wellbeing and urban identity, the relationship between wellbeing and urban identity (based on the notion of *Eigenart* from WBGU, see (Changes, 2016)) in an urban context, can be represented through figure 6-1. It represents the main theoretical framework behind this research. Wellbeing consists of various attributes, identity (or *Eigenart*) is one of them. Identity in turn consists of various elements and can be affected due to changes in any of them. This network of relationships between attributes and elements, makes wellbeing complex but comprehensive. This framework has a layered structure with individual at its core, followed by the neighbourhood they live and then the city/urban district. There are various tangible dimensions of this vast network such as mobility, environment, health and quality of life which together provide the sense of safety, human scale (walkability), inclusivity and accessibility at all levels. The wellbeing of people and their urban identity depend upon all these elements, dimensions and layers, which makes cities a complex and very dynamic system.

Figure 6-1: Wellbeing and Eigenart in urban areas



Source: - By author based on the discussion with Prof. Alexander J Schmidt, ISS, University of Duisburg-Essen, Germany and Prof. Gaurav Raheja, Department of Architecture and Planning, Indian Institute of Technology, Roorkee, India and the notion of Eigenart from WBGU (WBGU, 2016).

6.3 Inferences

On the basis of the previous chapters, it can be argued that all three CSAs are influenced by intrinsic as well as extrinsic factors. These factors range from physiological, demographic, economic, administrative, systemic to cultural, religious, political, historical and more. For example, Stadtkern has location advantages as compared to the other two CSAs while some of the challenges that Altendorf faces are influenced by the historical factors. Some of the advantages as well as the challenges that Heisingen faces are geographical and cultural in nature. Like many cities in Europe (Council, 2015), Essen is undergoing the revival of its city centre as well (Lindgens, 2014). This research validates the policy to refocus on the city centre to be in the right direction as, despite apparent problems, city centre can provide higher wellbeing than suburbs due to its locational and overall cost advantages (Bernard, 2010). This research underlines the complex and context specific nature of wellbeing in cities. All three CSAs belong

to the same city along with 47 other neighbourhoods that together form the city of Essen, however, their sense of wellbeing is likely to differ from each other. Depending upon the level and customisation of data collection, tools employed, the methodology and participation of relevant stakeholders, this difference within neighbourhoods can be understood, quantified and addressed. While this makes policy formulation more resource contingent, it also presents the opportunity to ensure a more efficient utilisation of the resources in each neighbourhood and flourishing citizens across the city.

The notion of wellbeing and urban identity are subjective and as it has emerged in this research, they depend highly on the context. Various factors including culture, politics, belief system and others, which are often beyond the sphere of direct influence of urban planning and the city administration, together determine the wellbeing and the urban identity of the people. Therefore, it becomes important to provide a supportive ambience where people have choices to fulfil what constitutes their wellbeing, as they wish. By addressing the intangible layers of a city, a more conducive space that enhances wellbeing (and the identity) of people can be co-created by the mutual efforts of all stakeholders. This can be related to the idea of development as freedom (Sen, 1999) at the urban level for the 21st century cities.

The global best practices discussed in chapter IV provide inspiration and guideline on how this can be translated from research into policies and further into actions. While all these examples have a different context than Essen, they provide various possible approaches to enhance wellbeing and these can be modified to suit the local context. For example, the lessons learned in Medellin (public buildings in troublesome/neglected areas; creating the reasons for visit) can be modified to suit the needs of Essen. Similarly, the initiative of Santa Monica to develop a data driven detailed assessment of wellbeing of its residents indicates toward the new trend of data driven (or Big data) customised urban planning that depends upon technology and public participation. The findings from the examples are used to formulate policy recommendations in section 6.5.

6.4 Correlating with the hypothesis and research questions

This research started with the objective of understanding what wellbeing and urban identity stand for from the urban planning perspective, and to examine if approaching wellbeing (of a defined area) from the urban identity perspective, provides a different or complementary understanding of wellbeing (of that area). Based on the results obtained in Chapter V and the conclusions discussed in this chapter, it can be stated that the analysis of wellbeing of Altendorf, Stadtkern

and Heisingen from the urban identity perspective does provide a different understanding of the same. Heisingen is one of the most prestigious residential neighbourhoods in Essen and it enjoys a far positive image in media and public perceptions, which like most residential neighbourhoods from the southern part of Essen, is seen as 'superior' to Altendorf and Stadtkern, which on the other hand, are seen as more similar to other 'inferior' neighbourhoods from the northern parts of Essen (Weiguny, 2013). Altendorf has a rather negative image and is often associated with crime and lower quality of life. Stadtkern has a mixed image and consists of pockets with very positive images and pockets with negative ones.

The findings from this research provide another insight into the wellbeing of the residents of these areas and all three areas are found to have a rather positive standing on the urban identity matrix. This result presents a deeper understanding of these areas. The four research questions of this research are explored in different chapters. The notion of wellbeing is explained from different perspectives in Chapter 2 and its understanding from the urban planning perspective is highlighted. Chapter 3 explores urban identity theoretically and explains it from the urban planning perspective. In Chapter 5, the urban identity of the three CSAs is empirically explained and this chapter (in addition to Chapter 5) uses the understanding of urban identity as a complementary tool to enhance the wellbeing in CSAs through broad policy recommendations. These results correlate with the hypothesis of this research and answer all the research questions.

6.5 The way forward

Based on all previous chapters, this section aims to provide a basic framework/guideline for the translation of this research into policies that can assist city authorities, urban planners and academics alike to understand, measure and formulate effective measures to address the enhancement of wellbeing in their respective areas. This approach can be divided into two categories short/medium term policy planning and long term policy planning. This provides a theoretical framework which can serve as the starting point to design neighbourhood specific as well as city wide programmes and projects in future.

6.5.1 Short term and long term strategies

The issues raised in this research are categorised into two groups, short/medium term and long term, and the strategies to address them are categorized accordingly. For example, lack of interest in voting can be addressed by a combination of all three strategies. Among others, one of the short term strategy can be to raise the awareness and to have more representative candidates; another short/medium term strategy should be to establish a grass root political

connectedness and the long-term strategy should be empowering people (removing language barriers, raising awareness related to citizen rights etc.) to feel part of the community to the extent that they take pride in voting and in exercising their other citizen rights. These together enhance the sense of empowerment and participation in residents, which research has shown to improve the sense of wellbeing (Frey & Stutzer, 2002). Similarly, there are (some) new initiatives planned exclusively for the northern parts of Essen and supported by the government that aim to provide alternative employment to unemployed while providing a better care to the elderly (Spletter & Praske, 2016). This scheme can bring positive changes by creating employment as well as fostering the sense of care and belonging among the residents.

This research deals mainly with qualitative issues, and considering their nature and the data analysed, issue specific short/medium term and long term strategies are listed in table 6-3. As these issues are complex and require various stakeholders to work together to address them, the immediate actions are not listed as that would require further in-depth data analysis for which data is not available at the time of this research. However, this research provides theoretical foundations that can be expanded to perform data driven in-depth analysis of specific area which can be then used to recommend sector specific immediate actions.

Table 6-3: - Short/medium term and long term focus areas

Sector/Issue	Short/medium term strategy	Long term strategy
Demography	Minimize gentrification – through rental policies, balanced spatial distribution of social housing, spatial balanced distribution of public areas and areas of interest across neighbourhoods	Create supportive framework for the heterogenous population distribution (addressing issues related to age group distribution, land value, rental value, transportation etc.)
	Improving work – life balance by reducing the travel time, balanced spatial allocation of commercial and residential areas, optimal weekly working hours	Improving the land use in cities to foster better work life balance, compact city, transit oriented development
		Creating more meaningful employment

Life assessment and satisfaction with life	Enhanced access to public space including weekly markets, fairs and public events Addressing the growing concern of loneliness in urban areas	Creating avenues for dialogue between people living in the same neighbourhood as well as people from different neighbourhoods
		Supporting assimilation and integration of migrants through better language and cultural workshops
		Supporting discussions regarding the more robust understanding of life and supporting those who are vulnerable, preparation of urban wellbeing plan
Access	Provision of equal and suitable standard of living across city	Reducing income inequality as well as the dependence on social benefit
Association, belongingness, Image and Identity	Enhancing avenues of association for people from different neighbourhoods through improved communication and attraction, organization of events, neighbourhood fairs and markets etc. Steps to discourage gentrification and encourage assimilation	Review of the land use and zoning policies, preparation of urban wellbeing plan
		Targeted urban innovation
Health	Enhanced access to quality open space, sports and recreation facilities across neighbourhoods	Providing and promoting healthier life style, de-growth society
Community	Interesting/attractive participatory programmes such as urban regeneration through community painting and gardening (conceptually based on the examples from Rio de Janeiro and Medellin, see section 4.3 and 4.4)	Providing new physical and social networks that connect the neighbourhoods, through strategic land use allocation, trip generation, usage and social housing and promote human scale

Safety	Providing employment and social security, crime prevention and control, rehabilitation	Personality specific employment, reduction of social and wealth inequalities
Policy formulation and planning	enhanced participatory planning (such as participatory budgeting), local wellbeing indicator (similar to Santa Monica, see section 4.2), integrated development plan addressing additional concerns of sustainability, resilience and environment protection	Data driven participatory planning based on the principles of urban wellbeing and identity
Source: - By author		

Most of the focus areas mentioned in table 6-3, cut across sectors and would require a complex collaboration of actors from different backgrounds. On the basis of the theoretical framework for wellbeing and urban identity, created in this research, sector specific data can be collected and analysed to formulate policies. Cities around the world are experimenting with the idea of measuring and enhancing the wellbeing of their residents, as the example from Santa Monica shows (Monica, 2015). The short/medium term and long term strategies recommended in table 6-3 are based on previous chapters as well as the policy guidelines from leading agencies such as UN, GIZ and OECD.

The emphasis on addressing gentrification, zoning as well as work–life balance through a spatially balanced land use policy can enhance the access for all residents while minimizing superficial advantages that certain neighbourhoods have over others (GIZ, 2011, p. 26); (OECD, 2017, p. 10). This along with a balanced distribution of social and affordable housing across city, can allow Essen to have a more heterogenous population distribution and can balance the demographic advantages and disadvantages that it faces at present. Density plays a significant role in providing access to residents and the emphasis on the transit oriented development can allow Essen to provide higher and equal quality of life across neighbourhoods (Programme, 2015b, p. 25). The preparation of a participatory plan that aims to address wellbeing, sustainability, loneliness as well as ensures satisfactory quality of life across city can help Essen in addressing most of the challenges listed in table 6-3 as well as others that it faces at the present (Programme U. N., 2015a, p. 10). The promotion of human scale in all planning endeavours can allow communities to have higher social cohesion, stronger relationship as well as in fostering belongingness and

participation (Gehl, 2010). Such a planning process can be supported by the advancement in data collection and analysis using the concept of big data (Batty, 2013).

The strategies presented in table 6-3 provide an overview of the complex nature of the issues related to wellbeing and urban identity. The multitude of stakeholders involved in this process is massive and each step will involve multiple partnerships. This indicates the changing nature of urban planning and governance for the cities of the 21st century. Not only, how cities are planned is changing, but the way they are governed is changing as well. Factors such as association, belongingness and trust require a much higher level of public participation, to the extent that the planning process for the cities of the future may change from mere consultation to delegation and devolution. Participatory budgeting is one such example that is becoming popular in cities across the world and has brought significant changes (Cabannes, 2015) and should be implored by Stadt Essen. This can enhance the financial efficiency as well as the sense of belongingness, participation and the outlook among the residents as the example from Porto Alegre, Brazil shows (Programme, 2015b).

As stated earlier, these strategies will require multi stakeholders, and the role of the city administration and the government will have to change accordingly. Though the relationships between different actors will only become clear once any actual project is undertaken, regardless of that it can be stated that planning for wellbeing requires a reworking of the entire planning process itself including the power structures that are present in the present-day plan making process. The challenges that such an approach may present can be assumed to be more resource intensive and time consuming but the apparent benefits will outnumber such concerns. This research can be used as a starting point for further research in this direction.

These strategies are likely to be beneficial for the government as well as to the society at large, as higher involvement would ensure better implementation, acceptance and maintenance of the projects. This is likely to result in reduced running costs in the long term. As the outreach of the notion of wellbeing covers various aspects of people in cities and the implementation of related projects improves, this is likely to have multiplier effect on other sectors as well.

6.6 Further research based on this study

This is a new and relatively unexplored field of research. It presents a massive task as well as an opportunity for the city administration, academia, the public sector and private actors alike. Governments from various parts of the world are gradually investing more into related research. Some cities (for example Santa Monica, as discussed in Chapter 4) are trying to explore ways to

incorporate wellbeing into their planning strategies. Depending on the level at which this research is taken further, there are various possibilities of further research and exploration, for which this research can serve as the starting point. This research is based on secondary data sources; using the framework this research provides, a deeper understanding of wellbeing and urban identity can be achieved by gathering more in-depth primary data. Another area of further research can be, to analyse how the local, regional and national level public policy formulation can accommodate the growing understanding of wellbeing and to highlight the enabling conditions to overcome the challenges that such an approach is likely to present. This can also complement the growing debate in academia and government spheres, regarding the need to go beyond GDP and how wellbeing can become the new narrative of the cities of the 21st century.

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Annexure A-1

A1 – Questionnaire used in the “*Neue Verkehrskonzepte für die Stadt der Zukunft*” (or New mobility concepts for the city of future) study referred in this report as the KWI Survey, 2012.

This is not the actual format of the questionnaire. The original format was modified for formatting and design purposes.

#	Question in German	English equivalent
	RespondentNumber	Respondent Number
	DispoCode	Dispo-code
	Dauer	Duration
1	Besitzen Sie persönlich ein Auto?	Do you personally have a car?
2	Haben Sie vor, demnächst auf ein Auto umzusteigen?	Do you intend soon to upgrade to a car?
3	Wie groß ist die Entfernung zwischen Ihrer Wohnung und Ihrem Arbeitsplatz bzw. Ihrer Ausbildungsstelle?	What is the distance between your home and your workplace or your apprenticeship?
4	Welche Verkehrsmittel nutzen Sie regelmäßig für den Weg zur Arbeit bzw. zur Ausbildung?	What are you going regularly to commute to work or to education?
	Auto	car
	Motorrad/Moped	Motorcycle / Moped
	Öffentlicher Nahverkehr (Bahn + Bus)	Public transport (train + bus)
	Fahrrad	bicycle
	zu Fuß	on foot
	Fahrgemeinschaft	carpool
	Sonstiges, und zwar:	Other, namely:
	Sonstiges, und zwar: (offene Nennung)	Others, namely: (open choice)
	[weiß nicht]	[I do not know]
	[Keine Angabe]	[No information]
5	Welche Verkehrsmittel nutzen Sie regelmäßig für den Weg zum Einkaufen bzw. für sonstige Erledigungen?	What are you going regularly for the way to go shopping or for other errands?
	Auto	car
	Motorrad/Moped	Motorcycle / Moped
	Öffentlicher Nahverkehr (Bahn + Bus)	Public transport (train + bus)
	Fahrrad	bicycle
	zu Fuß	on foot
	Fahrgemeinschaft	carpool
	Sonstiges, und zwar:	Other, namely:
	Sonstiges, und zwar: (offene Nennung)	Others, namely: (open choice)
	[weiß nicht]	[I do not know]
	[Keine Angabe]	[No information]
6	Welche Verkehrsmittel nutzen Sie regelmäßig für den Weg zu Freizeitaktivitäten?	How do you go regularly for leisure activities?

	Auto	car
	Motorrad/Moped	Motorcycle / Moped
	Öffentlicher Nahverkehr (Bahn + Bus)	Public transport (train + bus)
	Fahrrad	bicycle
	zu Fuß	on foot
	Fahrgemeinschaft	carpool
	Sonstiges, und zwar:	Other, namely:
	Sonstiges, und zwar: (offene Nennung)	Others, namely: (open choice)
	[weiß nicht]	[I do not know]
	[Keine Angabe]	[No information]
7	Wie viel Geld geben Sie durchschnittlich im Monat für Benzin, Fahrscheine, Leasing etc. aus?	How much money do you spend on average per month for petrol, tickets, etc. Leasing of?
8	Wie viel Geld geben Sie durchschnittlich im Monat für Benzin, Fahrscheine, Leasing etc. aus? (offene Nennung)	How much money do you spend on average per month for petrol, tickets, etc. Leasing of? (Open choice)
9	Ich lese Ihnen nun einige Aussagen zum Thema Elektroauto vor. Elektroautos haben keinen herkömmlichen Verbrennungsmotor, sondern einen elektrischen Antrieb. Bitte sagen Sie mir, inwieweit Sie persönlich den folgenden Aussagen voll und ganz zustimmen, eher zustimmen, eher nicht zustimmen oder überhaupt nicht zustimmen.	I am now reading some statements on the topic of electric cars. Electric cars have no conventional internal combustion engine but an electric motor. Please tell me to what extent you personally agree with the following statements in full, rather agree, rather disagree or do not agree at all.
a	Angenommen, Elektroautos wären genauso teuer wie herkömmliche Autos: Ich würde mir auch trotz einer geringen Reichweite von ca. 150km ein Elektroauto kaufen und sei es als Zweitwagen.	Suppose electric cars would be just as expensive as conventional cars: I would buy even despite a limited range of about 150km an electric car and whether it as a second car.
b	Ich würde ein Elektroauto nutzen, unabhängig davon, wo die Energie herkommt.	I would use an electric car, regardless of where the energy comes from.
c	Ich würde mir ein Elektroauto kaufen, wenn das Ladestationennetz und der Service dafür besser ausgebaut wären.	I would buy an electric car if the charging station network and the service would ensure better developed.
d	Ich würde mir ein Elektroauto kaufen, wenn es finanzielle Anreize wie beispielsweise steuerliche Vergünstigungen oder Zuschüsse zu den Anschaffungskosten gäbe.	I would buy an electric car if there were financial incentives such as tax concessions or grants at cost.
10	Stellen Sie sich vor, Sie könnten sich mit Ihrem Mobiltelefon vor jeder Fahrt bequem darüber informieren, mit welchen Verkehrsmitteln Sie am schnellsten zu Ihrem Ziel kommen. Dazu würden Sie aktuelle Informationen über Verspätungen, Staus etc. bekommen und Vorschläge, wie Sie diese mit verschiedenen Verkehrsmitteln umgehen können. Außerdem könnten Sie einfach Tickets reservieren und bezahlen. Bitte sagen Sie mir, inwieweit Sie persönlich den folgenden Aussagen voll und ganz zustimmen, eher zustimmen, eher nicht zustimmen oder überhaupt nicht zustimmen.	Imagine, with your mobile phone, you can easily find out which transport means you are most likely to reach your destination earlier for each trip. You would get up-to-date information about delays, traffic jams, etc. and suggestions on how to deal with different means of transport. In addition, you could easily reserve and reserve tickets. Please tell me to what extent you personally agree with the following statements in full, rather agree, rather disagree or do not agree at all.
a	Ich würde diesen Service nutzen, wenn ich dadurch Zeit und Geld gegenüber der Autonutzung sparen könnte.	I would use this service if I could thereby save time and money compared to the use of car.

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| <p>b Ich würde dafür auf die Nutzung des Autos in der Stadt verzichten und häufiger den öffentlichen Nahverkehr nutzen.</p> <p>c Mir sind diese neuen technischen Möglichkeiten zu kompliziert.</p> <p>11 Im Folgenden lese ich Ihnen einige Aussagen zum Thema öffentlicher Nahverkehr und Carsharing vor. Carsharing bezeichnet das gemeinschaftliche Nutzen eines Autos, d.h. man kann bei Bedarf von einer Organisation ein Fahrzeug mieten und bei Bedarf auch mit anderen Mitfahrern teilen. Bitte sagen Sie mir, inwieweit Sie persönlich den folgenden Aussagen voll und ganz zustimmen, eher zustimmen, eher nicht zustimmen oder überhaupt nicht zustimmen.</p> <p>a Ich wäre bereit, gemeinsam mit anderen Menschen ein Auto zu teilen.</p> <p>b Ich würde für ein solches Angebot auf mein eigenes Auto verzichten.</p> <p>c Ich würde für ein solches Angebot auf den öffentlichen Nahverkehr verzichten.</p> <p>d Ich würde auf mein eigenes Auto verzichten, wenn der städtische Nahverkehr innerhalb der Innenstadt kostenlos wäre.</p> <p>e Ich würde auf die Anschaffung eines Autos verzichten, wenn es günstigere ÖPNV-Angebote gäbe.</p> <p>f Ich würde Carsharing nutzen, wenn das Parken dafür in der Innenstadt kostenlos wäre.</p> <p>G Ich würde den städtischen Nahverkehr häufiger nutzen, wenn Busse und Bahnen häufiger fahren würden.</p> <p>h Ich würde für ein Monatsticket des öffentlichen Nahverkehrs bis zu 15% mehr bezahlen, wenn ich damit auch Carsharing und Radverleih nutzen könnte.</p> <p>12 In den folgenden Aussagen geht es um das Thema Fahrrad und den Verzicht auf das Auto. Bitte sagen Sie mir, inwieweit Sie persönlich den folgenden Aussagen voll und ganz zustimmen, eher zustimmen, eher nicht zustimmen oder überhaupt nicht zustimmen</p> <p>a Ich würde häufiger mit dem Fahrrad fahren, wenn die alltäglichen Wege in der Stadt sicherer zurückzulegen wären.</p> <p>b Ich würde häufiger mit dem Fahrrad fahren, wenn es mehr Radwege in der Stadt geben würde.</p> <p>c Ich würde häufiger mit dem Fahrrad fahren, wenn auf zweispurigen Straßen in der Innenstadt die rechte Spur nur für Radfahrer und Fußgänger freigegeben wäre.</p> <p>d Ich würde häufiger mit dem Fahrrad fahren, wenn einzelne wichtige Straßen in der Innenstadt komplett für den Autoverkehr gesperrt wären.</p> <p>e Ich wäre bereit, eine jährliche Gebühr von ca. 10€ für den Ausbau von Radwegen zu zahlen.</p> | <p>I would return, waive the use of cars in the city and more frequent use of public transport.</p> <p>I find these new technical possibilities too complicated.</p> <p>In the following, I will give you some information on public transport and car sharing. Carsharing refers to the common utility of a car, i.e. you can rent a vehicle from an organization and share it with other passengers if necessary. Please tell me to what extent you personally agree with the following statements in full, rather agree, rather disagree or do not agree at all.</p> <p>I would be willing to share with other people a car.</p> <p>I would do without that kind of range on my own cars.</p> <p>I would do without for such an offer to the public transport.</p> <p>I would do without my own car when the urban transport would be free within downtown.</p> <p>I would forego the purchase of a car, if there were more favorable public transport services.</p> <p>I would use Carsharing when parking it would be free in downtown.</p> <p>I would use urban transport more frequently if buses and trains would run more frequently.</p> <p>I would pay for a monthly ticket public transport up to 15% more if I could thus make use of Carsharing and bike rental.</p> <p>The following statements are about the topic of cycling and the giving up of your car. Please tell me, to what extent you personally agree with the following statements fully, agree rather, do not agree or do not agree at all.</p> <p>I would often ride a bike when the everyday way would back down safe in the city.</p> <p>I would often go by bike, if there were more bike paths in the city.</p> <p>I would often ride a bike when the right lane would be released only for cyclists and pedestrians on two-way roads in downtown.</p> <p>I would often ride a bike when individual major roads in the city were completely closed to motor traffic.</p> <p>I would be willing to pay an annual fee of 10 € for the expansion of bicycle paths.</p> |
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| <p>13 Die folgenden zwei Aussagen beziehen sich auf das Thema Fußverkehr. Bitte sagen Sie mir, inwieweit Sie persönlich den folgenden Aussagen voll und ganz zustimmen, eher zustimmen, eher nicht zustimmen oder überhaupt nicht zustimmen.</p> <p>a Ich würde häufiger zu Fuß gehen, wenn ich für kleinere Einkäufe maximal 10 Minuten gehen müsste.</p> <p>b Ich würde häufiger zu Fuß gehen, wenn das städtische Umfeld sicherer wäre.</p> <p>14 Ich lese Ihnen nun einige Merkmale vor, die eine Stadt haben kann. Bitte bringen Sie diese in eine Reihenfolge. Beginnen Sie dabei mit dem Merkmal, dass Ihnen am wichtigsten ist.</p> <p style="text-align: center;">schöne Fassaden
gute Erreichbarkeit
Grünflächen
sichere Fuß- und Radwege</p> | <p>The following two statements relate to pedestrian traffic. Please tell me, to what extent you personally agree with the following statements in full, agree rather, do not agree or do not agree at all.</p> <p>I would often walk, if I had to go more than 10 minutes for smaller purchases.</p> <p>I would often walk when the urban environment would be safer.</p> <p>I will now read out some characteristics that can have a city. Please take them into a sequence. Begin with the feature that matters most to you.</p> <p style="text-align: center;">Beautiful facades
Good accessibility
Green areas
Safe walking and cycling trails</p> |
| <p>15 Die folgenden Aussagen beziehen sich auf das Thema Wohnen in der Stadt. Bitte sagen Sie mir, inwieweit die folgenden Aussagen für Sie persönlich voll und ganz zutreffen, eher zutreffen, eher nicht zutreffen oder überhaupt nicht zutreffen.</p> <p>a Ich finde es gut, wenn man in Zukunft nur noch mit Elektroautos in der Innenstadt fahren darf, um die Feinstaub- und Lärmbelästigung zu verringern.</p> <p>B Ich würde gerne in einer Gegend wohnen, in der ich meine alltäglichen Ziele innerhalb von 10 Minuten zu Fuß oder mit dem</p> <p>C Ich würde gerne in einer Gegend wohnen, in der ich meine alltäglichen Ziele innerhalb von 10 Minuten zu Fuß oder mit dem Rad erreichen könnte.</p> <p>16 Stellen Sie sich vor, es gäbe weniger Verkehr und entsprechend mehr freie Flächen in der Stadt. Diese Flächen können dann für verschiedene Möglichkeiten genutzt werden. Bitte bringen Sie dazu die folgenden Nutzungsmöglichkeiten nach ihrer Wichtigkeit in eine Reihenfolge. Die Nutzungsmöglichkeiten sind Spielplätze, Parkplätze, öffentliche Plätze und Grünflächen.</p> <p>17 Ich pflege einen gehobenen Lebensstandard.</p> <p>18 Ich gehe viel aus.</p> <p>19 Ich lebe nach religiösen Prinzipien.</p> <p>20 Ich halte an alten Traditionen meiner Familie fest.</p> <p>21 Ich genieße das Leben in vollen Zügen.</p> <p>22 Mein Leben gefällt mir dann besonders gut, wenn ständig etwas los ist.</p> <p>23 Sagen Sie mir bitte bei den folgenden Freizeitaktivitäten, ob Sie diese oft, manchmal, selten oder nie ausüben. Kunstaussstellungen oder Galerien besuchen.</p> | <p>The following statements refer to the topic of housing in the city. Please tell me the extent to which the following statements are true to you personally, rather than not, or not</p> <p>I think it's good if you only allowed to drive with electric cars in the city in the future to reduce the particulate matter and noise.</p> <p>I would like to live in an area in which I said my daily goals within 10 minutes on foot or by</p> <p>I would like to live in an area where I could reach my daily goals within 10 minutes on foot or by bike.</p> <p>Imagine that there is less traffic and correspondingly more free space in the city. These areas can then be used for various options. Please bring the following to use options in order of importance in e</p> <p>I maintain a high standard of living.</p> <p>I go out a lot.</p> <p>I live according to religious principles.</p> <p>I adhere to old traditions of my family.</p> <p>I enjoy life to the fullest.</p> <p>My life I like particularly well whenever something is going on.</p> <p>Tell me. Please indicate for the following activities, if you often, sometimes, rarely or never exercise this visit art exhibitions or galleries.</p> |

a	Bücher lesen [auch Fachbücher, aber keine Zeitschriften u.ä.]	Reading books [also textbooks, but no magazines, etc.]
b	Wie häufig lesen Sie folgende Arten von Tageszeitungen: Eine überregionale Tageszeitung	How often do you read the following types of daily newspapers: A national newspaper
d	Wenn Sie einmal in ein Restaurant richtig gut Essen gehen, wie viel EUR geben Sie dann maximal pro Person – inklusive Getränke – aus?	If you go once in a restaurant really good food, how much EUR then enter a maximum per person - including drinks - from?
e	Wenn Sie einmal in ein Restaurant richtig gut Essen gehen, wie viel EUR geben Sie dann maximal pro Person – inklusive Getränke – aus? (offene Nennung)	If you go once in a restaurant really good food, how much EUR then enter a maximum per person - including drinks - from? (Open choice)
24	Sagen Sie mir bitte, in welchem Stadtteil Sie in Essen leben. INT: KA = 999, WN = 888, Anderer Stadtteil = 777 Bitte Cod	Please tell me, in which part of town you live in Essen. INT: KA = 999, WN = 888, other district = 777 Please Cod
25	Sagen Sie mir bitte, in welchem Stadtteil Sie in Essen leben. Sonstiges	Please tell me, in which part of town you live in Essen. Others
26	Geschlecht	gender
27	Sagen Sie mir bitte, in welchem Jahr Sie geboren sind.	Please tell me what year you were born.
28	Welchen Familienstand haben Sie?	What is your marital status?
29	Haben Sie die deutsche Staatsangehörigkeit?	Do you have German citizenship?
30	Wurden Sie oder einer Ihrer Elternteile im Ausland geboren?	Have you or any of your parents born abroad?
31	Welchen höchsten allgemeinbildenden Schulabschluss haben Sie?	What is the highest general education qualification you have?
32	Welchen höchsten allgemeinbildenden Schulabschluss haben Sie? (offene Nennung)	What is the highest general education qualification you have? (Open choice)
33	Haben Sie eine abgeschlossene Berufsausbildung? Wenn ja, welche?	Do you have a completed vocational training? If yes, which?
34	Haben Sie eine abgeschlossene Berufsausbildung? Wenn ja, welche? (offene Nennung)	Do you have a completed vocational training? If yes, which? (Open choice)
35	Welche der folgenden Angaben zur Berufstätigkeit trifft auf Sie zu?	Which of the following information on occupation applies to you?
36	Wenn Sie nicht voll erwerbstätig sind: Sagen Sie mir bitte zu welcher Gruppe gehören Sie?	If you are not fully employed: Please tell me which group are you?
37	Wenn Sie nicht voll erwerbstätig sind: Sagen Sie mir bitte zu welcher Gruppe gehören Sie? (offene Nennung)	If you are not fully employed: Please tell me which group are you? (Open choice)
38	Welche berufliche Stellung trifft auf Sie zu?	What professional status applies to you?
39	Welche der Kategorien trifft dabei auf Sie zu?	Which of the categories applies here to you?
40	Welche der Kategorien trifft dabei auf Sie zu	Which of the categories impinges at you
41	Welche der Kategorien trifft dabei auf Sie zu?	Which of the categories applies here to you?
42	Welche der Kategorien trifft dabei auf Sie zu?	Which of the categories applies here to you?
43	Wie viele Personen leben ständig in Ihrem Haushalt, Sie selbst eingeschlossen?	How many people live in your household, yourself included?
44	Wie viele Personen leben ständig in Ihrem Haushalt, Sie selbst eingeschlossen? (offene Nennung)	How many people live in your household, yourself included? (Open choice)
45	Wie viele Personen in Ihrem Haushalt sind 18 Jahre und älter?	How many people are in your household aged 18 or over?

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| 46 Wie viele Personen in Ihrem Haushalt sind unter 18 Jahre alt?
47 Wie hoch ist das monatliche Netto-Einkommen Ihres Haushalts insgesamt? | How many people are under 18 years old in your household?
What is the monthly net income of your household in total? |
|---|---|

Annexure A-2

Media analysis of news article from WAZ.

As explained in Chapter V, the news was categories under 8 different categories, all these categories were coded for analysis. Each news was further defined as either positive and neutral in nature and was assigned code 1 and as negative with code 0. The coding was done for the statistical analysis. The news articles were collected in February 2017 from the online archive of WAZ (www.waz.de) where the results were sorted on the basis of relevance and the descending order of publication. The WAZ online archive provided these results as 10 news articles per page and the results from only first 10 pages were selected for this research due to the limitation of resources.

News Categories

News Type	Explanation	Code
Crime A	Non-life threatening crimes such as robbery, mugging, fights, theft, burglary etc.	11
Crime B	Very serious crimes such as stabbing, murder, rape, drug related offence	12
Accidents/Fire/Traffic	Either related to traffic/fire accidents or disruptions	13
Sports	Pertaining to sports events, club news and celebrations	14
Religion/Community	Related to community including religion and general developments	15
Politics	Local political news	16
Leisure/Entertainment	Recreation, open space, festivals, events etc.	17
Public Work and Others	Related to work done by the government and others	99
Source: - By author		

News articles

Altendorf

Heading	News Category	+/-
Page 01		
1. Nach Anne-Will-Auftritt: So kämpft Kassiererin aus Essen-Altendorf gegen unfaire Job-Bedingungen	15	0
2. Hochbunker in Essen-Altendorf wird versteigert	15	1
3. Ofen explodiert - Mann in Essen-Altendorf schwer verletzt	13	0
4. Zwei Verletzte bei Verpuffung in Essen-Altendorf	13	0
5. Das Cricket-Wunder von Essen-Altendorf	14	1
6. Schweinekopf an Moschee in Essen-Altendorf befestigt	12	0
7. Feuer gelegt: Festnahme nach Brand in Essen-Altendorf	13	0
8. Alkoholisierte Fußgängerin in Essen-Altendorf angefahren	11	0
9. Wohnungsbrand in Essen-Altendorf – keine Verletzten	13	0
Page 02		
1. Zwei Insassen bei Verkehrsunfall in Essen-Altendorf verletzt	13	0
2. Autofahrer fährt Jungen (13) in Essen-Altendorf an	13	0
3. Schulsportanlage in Essen-Altendorf ein Drittel teurer	14	0
4. Schneller auf die Rheinische Bahn in Essen-Altendorf	99	1
5. Pizzeria bei tumultartiger Schlägerei in Altendorf demoliert	11	0
6. „Essen kontrovers“ fragt: Altendorf wohin?	15	0
7. Falschparker-Einsatz in Essen-Altendorf endet in Tumulten	13	0
8. Edeka und Aldi am Krupp-Park in Essen-Altendorf	15	1
9. Türkeistudien aus Essen-Altendorf sind bundesweit gefragt	15	1
10. Nachbar eines Altendorfer Problemhauses filmt Rattenplage	15	0

Page 03

1. Messerstecherei in Spielhalle an Altendorfer Straße in Essen	12	0
2. Dieb erbeutet Bargeld in einer Spielhalle in Essen-Altendorf	11	0
3. Blutiger Streit in Essen-Altendorf: Mit Messer zugestochen	12	0
4. Essener überfährt seinen Vater (56) – und tritt auf ihn ein	12	0
5. Das ist Essen-Altendorf	15	1
6. Brand in ehemaliger Tankstelle in Essen-Altendorf	13	0
7. Leser spenden Grabstein für Mordopfer aus Essen-Altendorf	15	1
8. Nach tödlichem Raub – Essens OB will Programm für Altendorf	12	0
9. Essener nach Angriff auf Altendorfer Straße in Lebensgefahr	12	0
10. HSG Velbert/Heiligenhaus - Tura Altendorf Essen	14	1

Page 04

1. Hausbesitzer will Dealertreff in Essen-Altendorf zumauern	15	1
2. Schwierige Suche nach neuem Wahllokal in Essen-Altendorf	15	1
3. Essen-Altendorf: Problemstadtteil oder Chancenviertel?	15	1
4. Ein Toter bei Wohnungsbrand in Essen-Altendorf	12	0
5. Von Altendorf bis Werden: Das sind die Essener Stadtteile	15	1
6. Anwohner klagen über öffentlichen Drogenhandel in Altendorf	12	0
7. BSV Essen-Altendorf feiert drei Tage lang	14	1
8. Wie eine imposante Moschee in Essen-Altendorf entsteht	15	1
9. HSG Velbert/Heiligenhaus - Tura Essen Altendorf	14	1
10. Schulen in Essen-Altendorf müssen Kinder ablehnen	15	1

Page 05

1. Einbrecher verursacht Stromausfall in Essen-Altendorf	11	0
2. Bewaffneter Raubüberfall auf Friseur in Essen-Altendorf	12	0

3. SPD-Wahlplakat hängt in Essen-Altendorf seit sieben Monaten	15	1
4. Messerattacke in Essen-Altendorf – Mordkommission ermittelt	12	0
5. 89-Jährige in Essen-Altendorf von Trickdiebinnen überlistet	11	0
6. Zeugen beobachten mutmaßlichen Einbrecher in Essen-Altendorf	11	0
7. Polizei nimmt mögliche Metalldiebe in Essen-Altendorf fest	11	0
8. Bagger und Trecker in Essen vollständig ausgebrannt	13	0
9. Kleinhaus-Siedlung in Altendorf - Essens unbekannte Schöne	15	1
10. Eine saubere Altendorfer Straße in Essen	15	1

Page 06

1. Glauben unter der mächtigen Kuppel von Essen-Altendorf	15	1
2. Burg Altendorf in Essen	17	1
3. Das Projekt "Soziale Stadt" in Essen-Altendorf endet	15	1
4. Kirchengemeinden gegen Flüchtlingsheim in Essen-Altendorf	15	0
5. Offener Brief gegen Flüchtlingsheim in Essen-Altendorf	15	0
6. Geplantes Flüchtlingsheim in Essener Westen spaltet Parteien	15	0
7. Haus am See ersetzt in Essen-Altendorf das Altenheim	15	1
8. Essener Stadtochter will kein Asylheim nahe Neubaugebiet	15	0
9. Ehestreit eskalierte vor der Auto-Attacke in Essen-Altendorf	11	0
10. Anlass für Auto-Attacke in Essen war wohl Familienstreit	11	0

Page 07

1. Räuber überfällt Senioren in Wohnung in Essen-Altendorf	11	0
2. Essen - Altendorfer Straße ab Montag offen	15	1
3. Zeugin meldete Schlägerei – viele Schaulustige in Altendorf	11	0
4. Dschungel-König Ross Anthony renoviert Kindergarten in Essen	15	1
5. Neuer Anstrich für das Essener Problemviertel Altendorf	15	1

6.	Fachmarktzentrum in Essen-Altendorf zum Großteil vermietet	15	1
7.	Anwohner wollen Altendorf nicht den Dealern überlassen	11	0
8.	Mann stirbt bei Brand in Einfamilienhaus in Essen-Altendorf	13	0
9.	Essen erlebte ein friedliches Fest trotz Messerstecherei	12	0
10.	Bauarbeiten für Niederfeldsee in Essen-Altendorf beginnen	17	1

Page 08

1.	Bombe in Essen-Altendorf ohne Probleme entschärft	13	1
2.	Bombenentschärfung sorgt für starke Verkehrsbehinderungen	13	0
3.	Der Moschee in Essen-Altendorf fehlt noch die Kuppel	15	1
4.	Dealer gehören in Essen-Altendorf zum Straßenbild	12	0
5.	Beitz-Boulevard rückt Altendorf an die City	15	1
6.	Zwei Frauen im Mädchentreff "Perle"	15	1
7.	60 Personen bei Razzia in Essen überprüft	11	0
8.	Essener Allbau plant künstlichen See in Altendorf	17	1
9.	In Altendorf ist die ganze Welt zuhause	15	1

Page 09

1.	Altendorf leuchtet im Advent ganz besonders	15	1
2.	Debatte über Stadtteil: „Altendorf ist kein zweites Marxloh“	15	0
3.	DJK Altendorf kritisiert - „Fußballvereine werden bevorzugt“	14	1
4.	Intensivtäter hätte zum Tatzeitpunkt Arrest absitzen sollen	12	0
5.	Wenn Kinder in Altendorf am Wochenende hungern müssen	15	0
6.	Brutaler Übergriff in Altendorf: Mordkommission übernimmt	12	0
7.	Mann in Altendorf niedergestochen – Mordkommission ermittelt	12	0
8.	Kellerbrand in Altendorf – Feuerwehr rettet 27 Menschen	13	0
9.	Der Niederfeldsee poliert das Image Altendorfs auf	17	1

10. Altendorfer beschwerten sich über Drogenszene auf Spielplatz	12	0
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Page 10

1. Problem mit "Miet-Gästen" in Altendorf gelöst	15	1
2. Kirchengemeinden wollen kein Asylantenheim in Altendorf	15	0
3. Öffentlicher Drogenhandel: Erneuter Hilferuf aus Altendorf	12	0
4. Raubmord von Altendorf: Ministerium weist Vorwürfe zurück	12	0
5. Willkommen in Bad Altendorf	17	1
6. Opfer der Altendorfer Messerattacke weiter in Lebensgefahr	12	0
7. Bunker in Altendorf für 90.000 Euro verkauft - aber dieser Hoch-Bunker in der Helenenstraße ist noch zu haben!	15	1
8. Mordfall Altendorf: Familie hat kein Geld für Grabstein	12	0
9. Der kleine Baldeneysee von Altendorf	17	1
10. Altendorf leuchtet im Advent ganz besonders	15	1

Stadtkern

Heading	News Category	+/-
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Page 01

1. Hotelboom im Essener Stadtzentrum	17	1
2. Die zwei Seiten des Stadtzentrums	15	0
3. Stadtgarten Essen	17	1
4. Hooligans wollten in Essen gegen Salafisten demonstrieren	15	0
5. Feuerwehr rettet vier Menschen bei Kellerbrand in Essen	13	1
6. Essener hatte 2,0 Promille im Blut	13	0
7. SPD triumphiert bei der Landtagswahl - Essen sieht rot	16	1
8. Zu hohe Schadstoffbelastung vor Essener Schulen	15	0

Page 02

1. Warum unser Rad-Reporter die Essener Ruhrallee langfährt	13	0
2. Lebensmittelmarkt im großen Stil in Essen-Werden geplant	15	1
3. Hindenburgstraße bleibt nach Straßenstreit noch unangetastet	15	1
4. A40-Sperrung - Essen drohen drei Monate Stillstand	13	0
5. Student dreht in Essen Film gegen Vorurteile	15	1
6. Tschüss Tannenbaum - Weihnachtsende in Essen	15	1
7. Nebulöse Vorgänge am Marktplatz	15	1
8. EMG im Sommer auf den Spuren starker Frauen	15	1

Page 03

1. Junge Flüchtlinge leben gemeinsam im „Haus Sonnenweg“	15	1
2. Wir wollen Ihre Erinnerungen an die Friedrichstraße	15	1
3. Wie die Brüder Grillo Geschichte machten	99	1
4. Das Geheimnis der schwarzen Hand	99	1

Page 04

1. Figurtest für Kinder – Kritik an Apothekenmagazin „medizini“	99	1
2. SFS-Spiel wird 50 Minuten vor dem Anpfiff abgesagt	14	0
3. A40 bald wieder frei	13	1
4. Deutsche Wellness-Hotels halten nicht immer, was sie versprechen	17	1
5. Besuchermagnet Zollverein - die Welt zu Gast bei Kumpels	17	1
6. Zum Ganzttag am Viktoria-Gymnasium über die Autobahn?	13	0

Page 05

1. „Eine Kulturstadt wurde systematisch zerstört“	15	0
2. "News am Morgen" – die wichtigsten Themen des Tages	15	1
3. Ein Auto für Rechenkünstler	13	1

4. Umbau gestartet	15	1
5. Gegessen wird, was grün ist	15	1

Page 06 -10

1. "News am Morgen" – die wichtigsten Themen des Tages	15	1
2. Steeler Straße ab Freitagmorgen komplett dicht	13	0
3. Künftig nur noch vier Hauptschulen in Essen	15	0
4. Foto-Zeitreise durch die Region	15	1
5. Verliebte werden kreativ zum Valentinstag	15	1
6. Wohnungsanzeigen prüfen - Böse Überraschungen vermeiden	99	1
7. Wohnungssuche - So finden Sie die passende Wohnung	99	1

Heisingen

Heading	News Category	+/-
Page 01		
1. Radtourtipp - von Essen-Heisingen nach Essen-Rüttenscheid	17	1
2. Nach Tagesbruch in Essen-Heisingen: Nachbarn der Betroffenen sind geschockt - Familien dürfen wochenlang nicht in ihre Häuser	11	0
3. Nach Tagesbruch in Essen-Heisingen: Donnerstag können die ersten evakuierten Familien vielleicht in ihre Häuser zurück	11	0
4. Tagesbruch in Essen-Heisingen: Auto sackt mitsamt Garagenzufahrt weg	11	0
5. Bagger reißt das marode Schullandheim in Essen-Heisingen ab	99	1
6. Der Anleger Essen-Heisingen hat jetzt einen „See-Park“	17	1
7. Segelyacht rammt parkendes Auto in Essen-Heisingen	13	0
8. Verschärfte Auflagen: In Heisingen fällt Straßenkarneval aus	15	1

9. Neue Bänke erfreuen am Baldeneysee in Essen-Heisingen	17	1
10. Das Wottelfest in Essen-Heisingen steht vor dem Aus	17	1

Page 02

1. Autofahrer prallt gegen Mülltonnenbox in Essen-Heisingen	13	0
2. Heisingen, das Dorf auf der Essener Halbinsel	15	1
3. Spielplatz in Essen-Heisingen bleibt vorerst dunkel	15	0
4. "Tapita" in Heisingen – große Küche im kleinen Restaurant	17	1
5. 90-Jähriger stirbt bei Verkehrsunfall in Essen-Heisingen	13	0
6. Radtourtipp - vom Baldeneysee nach Essen-Heisingen	17	1
7. Zwei Schüsse auf Bus der Evag-Linie 145	15	1
8. Neue DLRG-Rettungsstation in Heisingen steht im Rohbau	15	1
9. Heisingen früher und heute	15	1
10. Derby Heisingen gegen Horst am 5. November	14	1

Page 03

1. Spanischer Name, bunte Küche: das „Tapita“ in Heisingen	17	1
2. Tagesbruch in der Zufahrt: Pkw in Heisingen versinkt im Loch	11	0
3. DLRG-Station am Baldeneysee in Heisingen nimmt Formen an	15	1
4. Bau von Flüchtlingsheim in Heisingen verzögert sich	15	0
5. Hubschrauber über Heisingen – Polizei erwischt Einbrecher	11	0
6. Der Abriss am alten Schullandheim in Heisingen beginnt	99	1
7. Eine-Welt-Kreise laden zum Fairen Sonntag nach Heisingen ein	17	1
8. Stadt befand Taubenhaltung in Heisingen als unauffällig	11	0
9. Nach Hundebiss in Heisingen: Peta fordert Hundeführerschein	15	0
10. Einbrecher schlagen vermehrt in Heisingen zu	11	0

Page 04

1. Der „Felix“ geht nach Heisingen	17	1
2. Pastor von St. Georg sagt der Gemeinde und Heisingen Adieu	15	1
3. Kanalbau an der Bahnhofstraße in Heisingen	99	1
4. MS Heisingen nach Havarie auf Baldeneysee wieder im Einsatz	17	1
5. Mit Mikus verschwindet ein Stück Heisingen	15	0
6. Tagesbruch in Heisingen	11	0
7. TTC Union macht Heisingen das Leben schwer	14	1
8. Auf den Spuren des alten Königshofs in Heisingen	17	1
9. SC Velbert II beim Turnier in Heisingen	14	1
10. SG Heisingen glänzt beim Auftritt „Am Hallo“	14	1

Page 05

1. Super-Erfolg für SG Heisingen	14	1
2. Wottelfest in Heisingen startet mit Live-Musik und Kirmes	17	1
3. Heisingen gibt einen von zwei verkaufsoffenen Sonntagen auf	15	1
4. Heisingen verliert klar gegen den Spitzenreiter	14	1
5. Acht neue Eigenheime am Schacht Jakob in Heisingen	99	1
6. SG Heisingen spekuliert auf Tabellenführung	14	1
7. MTG und Heisingen liefern spannendes Duell	14	1
8. SG Heisingen für Spitzenspiel gerüstet	14	1
9. Heisingen im Top-Duell mit VfB Kirchhellen	14	1
10. SG Heisingen hat große Personalprobleme	14	1

Page 06

1. In Heisingen wird nicht alles in Frage gestellt	14	1
2. Wenn in Heisingen der Tennisball auf der Möhre tanzt	14	1
3. Heisingen begrüßt Pfarrer Markus Heitkämper	15	1

4. SG Heisingen krönt Top-Leistung mit Platz drei bei DM	14	1
5. Heisingen steht an der Spitze	14	1
6. SG Heisingen feierte ihre Gold-Svea	14	1
7. Überruhr und Heisingen aus der Luft	17	1
8. Kampf gegen Einbrecher: Großeinsatz der Polizei in Heisingen	11	0
9. SG Heisingen macht es unnötig spannend	14	1

Page 07

1. SG Heisingen gewinnt spannendes Finale	14	1
2. Katholischen Frauengemeinschaft Heisingen stellt sich vor	15	1
3. SPD Heisingen informiert über Kitas im Revier	16	1
4. Wottelfest in Heisingen	17	1
5. Rocknacht in Heisingen wird nachgeholt	17	1
6. Das Soldatendenkmal von Heisingen	17	1
7. SEK nimmt 51-Jährigen in Heisingen fest	12	0
8. 1. TTC 31 Heiligenhaus deklassiert Heisingen	14	1
9. SV Moltkeplatz und SG Heisingen ziehen ins Endspiel ein	14	1

Page 08

1. Von Baum-Killern und Ölfinken in Heisingen	99	0
2. MS Heisingen steuert die Hauptstadt an	17	1
3. Neues Fleisch für Heisingen	15	1
4. Heisingen II überrascht Mintard	14	1
5. SG Heisingen jubelt über Rang vier	14	1
6. Heisingen siegt im Eilverfahren	14	1
7. SG Heisingen mit neuem Selbstvertrauen	14	1
8. SG Heisingen nach 9:3-Sieg erleichtert	14	1

9. Zwei Pokale für SG Heisingen	14	1
10. Der Name der Braut war in Heisingen wohlbekannt	15	1

Page 09

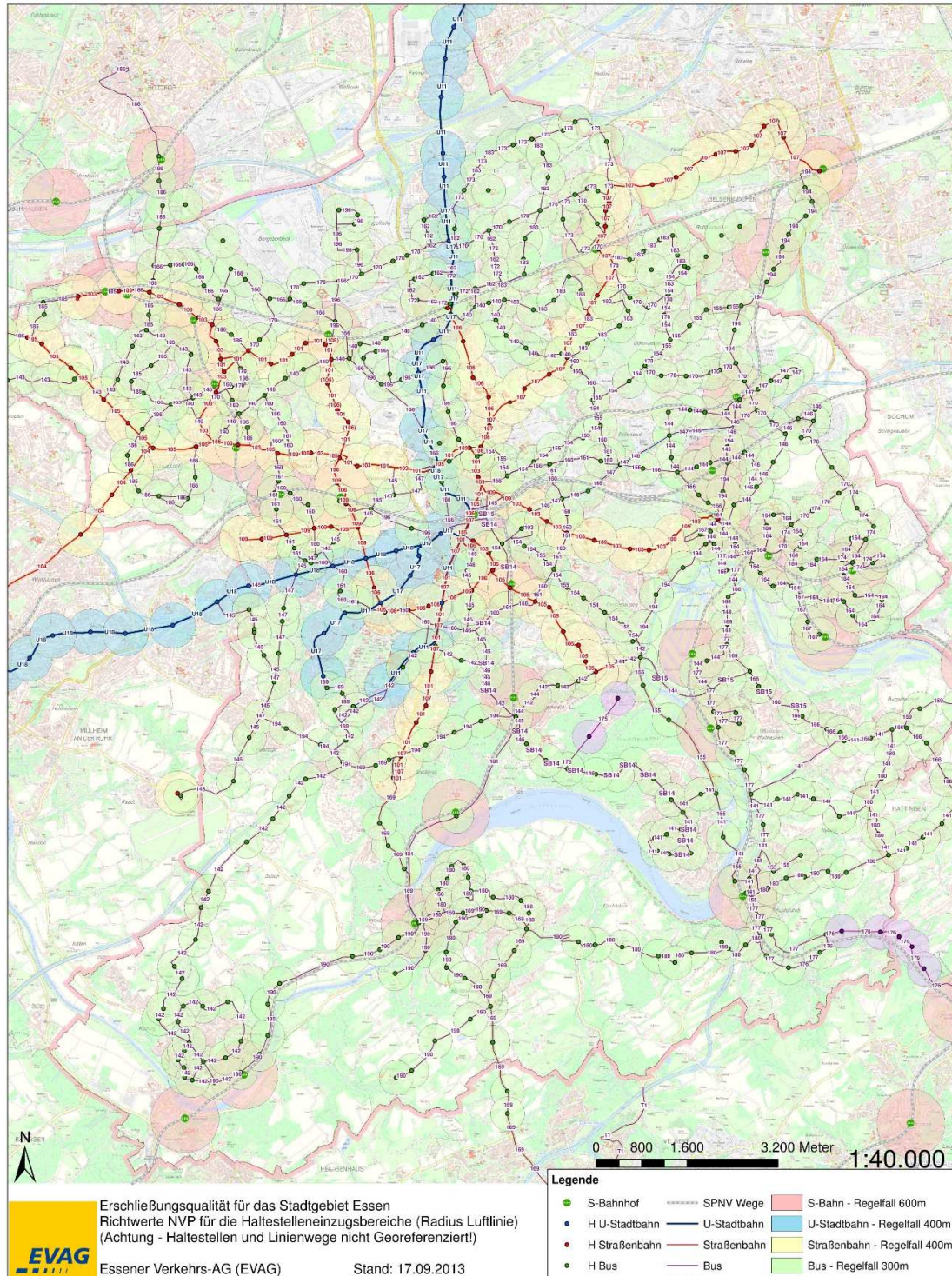
1. Aufsteiger Heisingen siegt beim Debüt	14	1
2. Kinder lernen schwimmen in Heisingen	15	1
3. Frauenkreis in Heisingen erinnert an Teresa von Avila	15	1
4. Wottelfest in Heisingen ist gerettet	17	1
5. Ein riesiges Stahlnetz sichert Hang in Heisingen	99	1
6. Arzt klagt erfolglos auf Parkverbotsschild in Heisingen	99	1
7. Heisingen und Schönebeck überraschen	17	1
8. Tusem punktet bei Meister SG Heisingen	14	1
9. Anekdoten von der katholischen Mädchenschule in Heisingen	15	1

Page 10

1. Heisingen stolpert und hakt Aufstieg ab	14	1
2. SG Heisingen hat ihr Meisterstück gemacht	14	1
3. SG Heisingen will Meisterstück machen	14	1
4. Fit in Form am Freitag mit der DJK Heisingen	14	1
5. Das ehemalige Schullandheim in Heisingen wird abgerissen	99	1
6. SG Heisingen ist wohl kaum noch zu stoppen	14	1
7. SG Heisingen hat das Ziel Verbands-Endrunde	14	1
8. Tusem im Duell mit Heisingen Außenseiter	14	1
9. Heisingen gewinnt das Verfolgerduell	14	1
10. Heisingen schlägt Holzbüttgen deutlich	14	1

Annexure A-3

Erschließungsqualität für das Stadtgebiet Essen



Public transport accessibility distance map

EVAG Punctuality report for PT serving Stadkern

Liniengenaue Auswertungen

Mit 123, Siepa Kuchler

Linie	EVAG-Punktlichkeit											
	Abfahrten an jeder Haltestelle, Montag bis Sonntag, Angaben in Prozent											
	Ø 2011	Ø 2012	Ø 2013	Ø 2014	Ø 2015	Ø 2016	Jul	Aug	Sep	Ok	Nov	Dez
U1+1	74	76	75	76	77	75	75	84	75	75	69	69
U1+7	76	81	80	83	81	75	80	86	82	83	72	76
U1+8	82	82	80	87	80	85	89	92	89	89	83	84
Ø Gesamt U	75%	82%	80%	81%	81%	80%	83%	87%	83%	83%	74%	76%
101	75	77	74	72	73	70	70	82	80	83	63	76
103	74	73	69	69	70	72	80	79	69	70	67	79
105	75	76	76	76	74	75	81	80	80	80	79	76
106	70	77	75	70	76	76	80	80	82	80	69	76
107	79	80	80	79	78	81	82	83	81	82	74	80
108	78	81	79	73	78	79	83	81	81	79	69	79
109	76	81	79	73	67	75	82	74	74	81	75	79
Ø Gesamt Strab	75%	76%	76%	74%	74%	77%	82%	81%	79%	72%	76%	79%
3814	59	62	59	67	63	65	77	70	62	61	46	61
145	90	91	91	77	76	83	87	88	82	80	91	83
146	83	84	84	84	84	84	84	84	84	84	84	84
147	82	85	84	81	86	90	90	90	90	90	90	86
SB15	81	79	80	81	83	84	86	86	83	83	83	84
1541	76	78	79	76	79	79	83	86	83	78	71	76
1551	76	76	79	80	78	80	83	83	78	79	76	76
166	79	80	79	80	80	79	80	79	77	82	76	75
193	83	83	83	83	87	87	91	89	92	80	79	76
196	60	70	69	68	73	76	78	80	81	78	75	70
Ø Gesamt Bus	75%	77%	78%	78%	80%	82%	84%	84%	81%	81%	78%	80%
Ø Gesamt	75%	77%	77%	77%	78%	81%	83%	83%	81%	81%	76%	79%
Zielwerte Qualitätsmanagement - Jahresdurchschnittswerte je Verkehrsmittel und Gesamt												
Stadkern Bus und Gesamt												
U-Bahn												
80%												
83%												

Auswahl Linien Stadkern

* Durchschnittswerte je Verkehrsmittel und Gesamt berücksichtigen alle Linien

Qualitätskriterium P u n k t l i c h k e i t

Durch die kontinuierliche Auswertung von Daten aus den Bordcomputern der Fahrzeuge können die tatsächlichen Abfahrtszeiten mit den Fahrplan Abfahrtszeiten verglichen werden. Es werden die Abfahrten an jeder Haltestelle jeder Linie über den ganzen Tag von Montag bis Sonntag ausgewertet.

Man erhält ca. 3 Millionen Datensätze monatlich, die mit Hilfe einer Software ausgewertet werden. Die Ergebnisse sind Monatsdurchschnittswerte der Pünktlichkeit pro Linie bzw. pro Verkehrsmittel. Sie stellen den Anteil pünktlicher Fahrten in Prozent dar. Der Qualitätsbericht enthält die Jahresdurchschnittswerte pro Verkehrsmittel und Gesamt.

Der im VRR empfohlene und auch bundesweit übliche Toleranzbereich für die Pünktlichkeit ist:

Keine Minute Verspätung bis 3 Minuten Verspätung (-59 sec bis + 180 sec)

Stauereignisse, fehlende eigenen Bahnkörper, die oftmals nicht vorhandene Vorrangschaltung für den ÖPNV an Lichtsignalanlagen usw. beeinflussen die Pünktlichkeit neben betrieblichen Ursachen maßgeblich.

Einflussfaktoren Pünktlichkeit

Vielart von Einflussfaktoren, nur zum Teil von Verkehrsunternehmen direkt beeinflussbar



Einfluss VU möglich, Schwerpunkt Maßnahmen für bessere Pünktlichkeit

Linie	EVAG-Pünktlichkeit											
	Abfahrten an jeder Haltestelle, Montag bis Sonntag, Angaben in Prozent											
	Ø 2011	Ø 2012	Ø 2013	Ø 2014	Ø 2015	Ø 2016	Jul	Aug	Sep	Ok	Nov	Dez
SE14	59	62	69	67	63	65	77	70	62	58	51	51
141	62	60	73	70	80	84	85	83	80	84	83	83
145	79	80	81	77	79	83	87	88	89	89	91	93
146	77	75	78	76	76	79	83	86	85	82	83	79
155	79	79	79	80	78	80	83	83	83	73	75	73
151**	75	79	75	75	74	78	79	80	81	78	75	75
Ø Gesamt Bus	75%	77%	78%	78%	80%	82%	84%	84%	81%	81%	78%	80%
Ø Gesamt	75%	77%	77%	77%	78%	81%	83%	83%	81%	81%	76%	79%
Zielwert Qualitätsmanagement - Jahresdurchschnittswerte je Verkehrsmittel und Gesamt												
181** Freizeittaxe am Wochenende, April bis Oktober												
Straßenbahn, Bus und Gesamt												
U-Bahn												
80%												
55%												

Auswahl Linien Heisingen
* Durchschnittswerte je Verkehrsmittel und Gesamt berücksichtigen alle Linien

Qualitätskriterium P ü n k t l i c h k e i t

Durch die kontinuierliche Auswertung von Daten aus den Bordcomputern der Fahrzeuge können die tatsächlichen Abfahrtszeiten mit den Fahrplan Abfahrtszeiten verglichen werden. Es werden die Abfahrten an jeder Haltestelle jeder Linie über den ganzen Tag von Montag bis Sonntag ausgewertet.

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Der im VRR empfohlene und auch bundesweit übliche Toleranzbereich für die Pünktlichkeit ist:

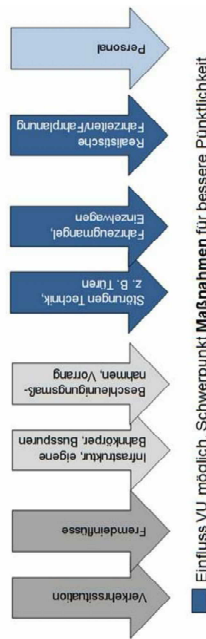
Keine Minute Verfrühung bis 3 Minuten Verspätung (-59 sec bis + 180 sec)

Stauereignisse, fehlende eigenen Bahnkörper, die oftmals nicht vorhandene Vorrangschaltung für den ÖPNV an Lichtsignalanlagen usw. beeinflussen die Pünktlichkeit neben betrieblichen Ursachen maßgeblich.

EVAG Punctuality report for PT serving Heisingen

Einflussfaktoren Pünktlichkeit

Vielfalt von Einflussfaktoren, nur zum Teil von Verkehrsunternehmen direkt beeinflussbar



Einfluss VU möglich, Schwerpunkt Maßnahmen für bessere Pünktlichkeit